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ABSTRACT

A study examined postsecondary occupational programs in clothing and textiles technology in Texas in order to (1) identify common essential competencies taught in postsecondary clothing/textiles technology programs, (2) develop and distribute student competency profiles of essential common competencies shared by the eight areas of study within these programs, (3) determine clothing/textiles technology competencies common to both secondary and postsecondary programs, (4) develop a play for articulation among and between postsecondary and secondary clothing/textiles technology programs, and (5) develop a model for improving communications among practitioners at both instructional levels. Data were obtained from a two-round Delphi study that was originally mailed to 100 postsecondary textiles/clothing teachers throughout Texas. Sixty-one teachers completed the first round and 45 completed the second. Of the 70 competencies and 259 subcompetencies included on the survey instruments, 59 and 191 reached a 70 percent or more consensus, respectively. Some of these were directly related to instruction provided at the secondary level in the areas of clothing, textiles, and home furnishings. (Appendixes, which comprise two-thirds of this report, include various survey-related correspondence, the survey instruments used in each round, a list of competencies and subcompetencies not reaching consensus, tables displaying responses pertaining to each of the individual competencies and subcompetencies, and a postsecondary clothing and textiles student competency profile.) (MN)

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POST-SECONDARY ANALYSIS OF CLOTHING/TEXTILES TECHNOLOGY PROGRAMS IN TEXAS

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The advisory committee contributed a great deal of assistance on the project. The select committee composed of post-secondary administrators and instructors, and business/industry representatives, assisted in planning the procedure of the project and developing the implementation guidelines. These members were:

Name	Title	Affiliation
Ann Clement	Owner	Clement's Showroom Dallas Apparel Mart
Patsy Flowers	Chairperson Consumer Services	Houston Community College
Kiki Kosh	President	Kiki Kosh Associates Dallas
Bill McCoy	Assistant Dean Occupational Education and Technology	St. Phillip's College San Antonio
Ella Parker	Division Chairperson Home Economics	San Jacinto College Pasadena
Marilyn Sullivan	Instructor Business Division	Brookhaven College Farmers Branch
Marcy Thorson	Instructor Apparel Design	El Centro College Dallas
Carol Tuohy	Director of Personnel	Sanger Harris Dallas
Dolly Weaver	Chairperson Interior Decorating	St. Phillip's College San Antonio
Edward Wetzel	Interior Designer	Foley's Houston

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Karen Price served as the project secretary. Her dedication in working on the project is to be commended.

The report is dedicated to all of the persons who have given of their time so graciously and generously. The project directors believe that this study is the first step toward improving post-secondary clothing/textiles technology in Texas.

Linda R. Glosson, Project Director

Patricia Horridge, Project Co-Director

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June, 1985

CHAPTER 1

OVERVIEW OF STUDY

The identification of competencies can be approached through sound empirical research, task analysis, and assessment of the needs of the society, and more particularly the needs of the school community (Weinstein and Houston, 1974). The purpose of this project was to study post-secondary occupational programs in clothing and textiles technology. The first objective of the study was to identify the essential competencies characteristic of the post-secondary program areas in clothing/textiles technology. This was done by means of a systematic study of the course descriptions and degree plans of the post-secondary clothing/textiles technology programs in Texas. Following the identification of several common curriculum areas (fashion merchandising, fashion design, pattern design, interior decorating, interior design, alterations and tailoring, tailoring, and upholstery), competencies essential to each of the areas were identified. The competencies were then listed in a questionnaire and sent to all instructors and program coordinators in post-secondary clothing/textiles technology in Texas.

The Delphi, a predictive concensus technique, was used to identify the common essential competencies in each curriculum area. Results of the Delphi survey, with input from the post-secondary clothing/textiles instructors, provided the essential competencies which formed the basis for the second objective which was to develop competency profiles of the post-secondary clothing/textiles technology programs in Texas. The third objective was to identify the essential competencies common to both secondary and post-

secondary programs in clothing/textiles technology through an analysis of existing secondary vocational curriculum materials and a study of competency profiles. The essential competencies found to be common to both secondary and post-secondary clothing/textiles technology programs were indicated on the student competency profile developed through this study. Plans for articulation and communication of the identified common essential competencies between secondary and post-secondary programs as well as among post-secondary clothing/textiles technology programs were developed as the final objectives of the study.

Throughout the study, the advisory committee played a central role in the execution of the project. The advisory committee participated in the identification of common curriculum and skill areas in the post-secondary clothing/textiles technology programs which served to generate a list of competencies relevant to the curriculum areas identified. The committee also assisted in making recommendations for articulation among post-secondary programs and between secondary and post-secondary programs in clothing/textiles technology. In addition, the committee contributed to a plan to facilitate communication among these programs.

Objectives

The major purpose of this project was to study post-secondary occupational programs in clothing and textiles technology in order to facilitate articulation and communication between clothing/textiles programs at the secondary and post-secondary levels. The specific objectives of the study were:

1. To identify common essential competencies taught in post-secondary clothing/textiles technology programs.

2. To develop and distribute student competency profiles of essential common competencies shared by the eight areas of study within the clothing/textiles technology programs at the post-secondary level.

3. To determine clothing/textiles technology competencies common to both secondary and post-secondary programs.

4. To develop a plan for articulation of identified common essential competencies among post-secondary clothing/textiles technology programs and between the post-secondary and secondary clothing/textiles technology programs.

5. To develop a plan or model for improving communication among the post-secondary clothing/textiles technology programs and between post-secondary clothing/textiles and secondary clothing/textiles technology programs.

Basic Assumptions

The following assumptions were basic to conducting the study:

1. It was assumed that the participants in the study would reply conscientiously to each of the Delphi questionnaires.

2. It was assumed that the competencies identified through a review of college catalogs and curriculum materials utilized in the clothing/textiles technology programs were representative of those competencies needed by clothing/textiles technology programs at the post-secondary level.

3. It was assumed that certain basic student competencies were already taught in post-secondary clothing/textiles technology programs.

Research Questions

The major formative research questions examined in the study are listed below.

1. What are the competencies needed by students in clothing/textiles technology programs?

2. What is the relative importance of these competencies as indicated by the respondents of the Delphi study?

Definition of Terms

1. Advisory committee - a group composed of representatives from the clothing/textiles technology business and industry and

post-secondary educators in clothing/textiles technology, who will serve in an advisory capacity to the present study.

2. Articulation - communication and cooperation between secondary and post-secondary educators designed to pave the way for the smooth progress of students through their education to a place in the world of work.

3. Clothing/textiles technology program - a group of curriculum areas that are related by a common program of study.

4. Communication - the first step in the development of an articulation model. Communication is when institutional interaction occurs (esp., when representatives from both institutions discuss the possibility of articulating).

5. Competencies - abilities, knowledge, skills, judgment, attitudes, and realities required for successful functioning in a position or role.

6. Competency profile - essential competencies needed in post-secondary clothing/textiles technology program.

7. Competency Rating Instrument - an instrument designed specifically for the study to show a compilation of competencies that could be rated as to importance in a clothing/textiles technology post-secondary program.

8. Concept - themes which recur throughout the curriculum in a cumulative and often overlapping way.

9. Curriculum area - refers to a course of study in clothing/textiles technology (fashion merchandising, fashion design, pattern design, interior decorating, interior design, alterations and tailoring, tailoring, and upholstery).

10. Delphi technique - intuitive methodology for organizing and sharing "expert" forecasts about the future.

11. Population of the study - based on the list of 100 instructors and program coordinators in post-secondary clothing/textiles technology programs in Texas.

12. Post-secondary - community/junior college level of education.

Summary

With the need to identify the common essential competencies for post-secondary clothing/textiles programs in Texas, and to facilitate articulation

and communication between clothing/textiles programs at the secondary and post-secondary levels, this study was designed and executed. The opportunity to participate in a Delphi survey will certainly heighten post-secondary clothing/textiles instructors' awareness of those competencies held in common by each of the various programs. Such an awareness will serve as a positive element in efforts to articulate and communicate among and between the programs identified. The study is reported in the four chapters to follow: Chapter II will present an overview of relative literature that includes procedures for defining, identifying, and prioritizing student competencies, competency studies, and a description of the Delphi technique; Chapter III presents a description of the methods and procedures used in the study; Chapter IV presents the results of the study; and Chapter V states the conclusions drawn from the study and implication of the study.

CHAPTER II

REVIEW OF LITERATURE

The primary focus of this review of literature is on four areas which relate to the identification of competencies needed in post-secondary occupational programs in clothing/textiles technology and in the facilitation of communication and articulation between clothing/textiles technology programs at the secondary and post-secondary levels. This review includes: 1) procedures for defining and identifying student competencies; 2) a discussion of selected competency studies; 3) a description of the Delphi forecasting technique; and 4) structuring of a model for communication and articulation.

Student Competencies

Competence by definition is tied to a position or role and that possession of required abilities, knowledge, judgment, skills, attitudes, values and proficient use of the same is what yields competence in an individual (Gale and Pol, 1975). Competence is a molar concept similar to the concept of intelligence, and is considered highly individualistic and is personal.

Student Competencies Defined

Monjan and Gassner (1979) used the term Performance Objectives instead of competencies. Educational offerings and activities are designed to promote student achievement of these Performance Objectives. When a student has successfully attained a Performance Objective, in a particular area, a "competency" has been developed. The term Performance Objective is used

synonymously with instructional objectives and behavioral objectives. Through the use of Performance Objectives, the educational goal is always known. With this kind of clarity, the student can make informed choices about what will be gained and the educational institution can measure the effectiveness of its educational activities.

Hall and Jones (1976) defined competencies as composite skills, behaviors or knowledge that can be demonstrated by the learner and are derived from explicit conceptualizations of the devised outcomes of learning. Criteria for successful achievement are always explicit and based on the specified objectives that contribute to the competencies being learned. Learning objectives are known to the student as a learning experience is begun.

Student Competencies Identification

Weinstein and Houston (1974) indicated that instructional programs identify the competencies that the learner is expected to demonstrate upon completion of a unit of learning. They cited the three approaches to identifying competencies: 1) sound empirical research, 2) task analysis, and 3) assessment of needs of the society and more particularly the needs of the school community.

Gale and Pol (1975) described the areas of competence as general areas in which a person must be competent in order to satisfactorily perform the functions of a specific position. These areas of competence consist of requisite knowledge, ability, capability, skill, judgment, attitudes, and values. A competence area may have many possible combinations of these components.

Hall and Jones (1976) believed that assumptions should be specified prior to the identification of goals and competencies. They gave the following sources from which to identify competencies:

1. Existing lists
2. Course translations
3. Course translations with safeguards
4. Taxonomic analysis
5. Input from the profession
6. Theoretical constructs
7. Input from clients (students and community)
8. Task analysis

Hall and Jones (1976) warned that if course content is the only input for competencies, gaps and overlaps will occur in the instructional program. Competencies should be compared with the instructor's own assumptions. Instructor's specified "ideal" competencies, in addition to existing course competencies, would strengthen the instructional program. Another procedure, stated by Hall and Jones, that is used to identify competencies, is to have faculty members rate, with use of the Delphi technique, competencies submitted by other instructors. A consensus group opinion of the most important competencies is reached through the analyzed data from one or more rounds of questionnaires. Theoretical constructs also can be used for the identification of competencies. A theoretical position is assumed by program builders and competencies can, therefore, be specified from the theory. Input from students and the community allows decision makers to obtain another perspective on competencies. Task analysis is another method of identifying

competencies. A limitation is that there are very few identified key competencies that have a true research basis.

Hall and Jones (1976) suggested the following taxonomy of competencies:

1. Cognitive competencies - specify knowledge, understanding, and awareness
2. Affective competencies - relate to values, attitudes, interests, and appreciation
3. Performance competencies - requires the demonstration of behaviors
4. Consequence or product competencies - requires the demonstration of the ability to bring change in others
5. Expressive competencies - provide experiences even though specific expected outcomes from the experiences may not be identified.

Competency Studies

An investigative search of competency studies related to post-secondary programs, in general, and post-secondary clothing/textiles technology programs, disclosed a dearth of available literature. The review presented, therefore, includes studies related only in the broadest sense. Three of the four studies discussed are related to the identification and validation of competencies for vocational education teachers and vocational teacher education programs. The fourth study identifies and validates competencies considered necessary and significant for a college-level beginning interior design course in home economics. The conclusion can be drawn that competency studies at the post-secondary level and in clothing/textiles are needed, and that the present study will contribute to a better understanding of the competencies needed in post-secondary clothing/textiles technology programs.

In 1973, Cook, et al., worked with university faculty members to develop a list of 75 competencies for a pre-service vocational teacher education

program. Validation of the competencies was done by business and industry representatives, vocational program graduates, school administrators, and teachers. As a result of the study, the competencies identified were classified into seven categories: 1) plan, 2) instruct, 3) evaluate, 4) guide, 5) manage, 6) public and human relations, and 7) professional role. The Center for Vocational Education, Ohio State University (1976) conducted a study to determine teacher competencies of vocational teachers. Three hundred and eighty-four competencies were identified and categorized into 10 areas: 1) program planning, development and evaluation; 2) instructional planning; 3) instructional execution; 4) instructional evaluation; 5) instructional management; 6) guidance; 7) school/community relations; 8) student vocational organizations; 9) professional role development; and 10) coordination. Approximately 1,000 vocational teachers, supervisors, and teacher educators were involved in identifying and verifying the competencies.

DeVaughan (1974) identified competencies needed by vocational and technical education teachers in Oklahoma. Students, teachers, administrators, business and industry representatives, state department curriculum staff and professional personnel development council members were asked to rate the list of competencies identified as to their importance for teachers of vocational and technical education. DeVaughn concluded from his study that many common competencies are shared by the different and technical disciplines and that the rated competencies reflect the majority of those needed by vocational and technical teachers.

Smith (1980) identified a list of competencies for students in a college-level beginning interior design course in home economics. Competencies compiled into a questionnaire were obtained from competencies and objectives

submitted by home economics educators in interior design. The list of competencies (five major competencies and 26 subcompetencies) were critiqued by a panel of experts, and then mailed to the initial contributors of the competencies and objectives. The 40 contributors rated each competency according to how important they believed it was for inclusion in a college-level beginning interior design course in home economics. It was concluded by Smith that there existed a general agreement among interior design faculty members in home economics as to which competencies were most important for students enrolled in a college level beginning interior design course. It was further concluded that all competencies and subcompetencies were considered important by interior design teaching faculty in home economics as indicated by the high ratings, that major competencies concerning elements and principles of design and use of materials were rated as most important with higher scores, and that competencies concerning appreciation and needs were of less importance, and the one concerning historical styles was considered least important of the five. A final conclusion drawn by Smith was that the time allotments should be proportionate to the rankings of the competencies from most time allotted to the highest ranked to least for the lowest ranked competency.

The Delphi: A Predictive Consensus Technique

The Delphi predictive consensus or forecasting technique has been defined in several ways. The classic definition has been presented by Helmer and Rescher (1959) in which they stated that the Delphi technique was a carefully designed program of sequential individual interrogation, best conducted by questionnaire, interspersed with information and opinion

feedback. Helmer and Rescher listed the Delphi technique as a series of conferences conducted in writing. They stated that the goal of the Delphi was to collect judgments and establish consensus about future probabilities in terms of such variables as time, quality and/or desirability of some future state. Weaver (1971) described the Delphi techniques as a perceptive method of organizing and collecting "expert" forecasts about the future. Linstone and Turoff (1975) characterized the Delphi as a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem. Parker and Taylor (1980) more recently noted that the Delphi technique, originally used as a forecasting tool, has been broadened and used as a method of reaching consensus as to the desirability of certain events or outcomes. They suggested that this modified Delphi technique could be used to validate teaching competencies, to analyze career education content, and to clarify educational objectives.

Rasp (1973) cited the following three characteristics of the Delphi technique:

1. Each participant contributes at each step of the questionnaire process before seeing the input of the other participants for that step
2. While the individual knows their own responses throughout the process, input of others remains anonymous
3. Input gained at one step of the process is shared as part of the next step

According to Linstone and Turoff (1975), the key characteristics for using the Delphi is to provide "structural communication," feedback of individual contributions of information and knowledge, assessment of information and knowledge, opportunity for individuals to review views, and a degree of anonymity for individual responses.

Dalkey (1972) listed the features of the Delphi as anonymity, controlled feedback, and statistical group response. Each of these features has a particular advantage according to Dalkey. He indicated that assuring the opinion of every member of the group in the final response, is probably even more important. Dalkey pointed out that within these three basic features many variations are possible.

The most common form of the Delphi process according to Linstone and Turoff (1975) was the pencil-and-paper version which is commonly referred to as a "Delphi Exercise" or "Conventional Delphi." In this version, a small monitor team designs a questionnaire which is sent to a larger respondent group. Upon return of the questionnaires, the monitor team summarizes the results, and, based upon the results, develops a new questionnaire which is again sent to the respondent group. Respondents are usually given at least one chance to re-evaluate their original answers based on examination of the group response.

The Delphi technique's advantages (Helmer and Rescher, 1959) are elimination of committee activity and reduction of the influence of certain psychological factors, such as specious persuasion, the unwillingness to abandon publicly expressed opinions, and the bandwagon effect of majority opinion. Dalkey (1972) listed the advantages of a Delphi exercise as: 1) providing a rapid and relatively efficient way to elicit expert opinions of a group of knowledgeable people since little effort is required to respond to a well-designed questionnaire, 2) providing a highly motivating environment for respondents through use of feedback, 3) lending objectivity to the outcomes through use of systematic procedures, and 4) allowing a sharing of responsibility through anonymity and group response. All of these features of

a Delphi exercise are desirable if the exercise is conducted in the context of policy formulation where group acceptance is an important consideration.

Linstone and Turoff (1975) identified the following as characteristics which may lead to the selection of the Delphi as a research technique:

1. The problem does not lend itself to precise analytical techniques, but can benefit from subjective judgments on a collective basis.
2. The individuals needed to contribute to the examination of a broad or complex problem have no history of adequate communication, and may represent diverse backgrounds with respect to experience or expertise.
3. More individuals are needed than can effectively interact in a face-to-face exchange.
4. Time and cost make frequent group meetings not feasible.
5. The efficiency of face-to-face meetings can be increased by a supplemental group communication process.
6. Disagreements among individuals are so severe or politically unpalatable that the communication process must be referred and/or anonymity assured.
7. The heterogeneity of the participants must be preserved to assure validity of the results.

Rasp (1973) identified the following two underlying assumptions of the Delphi process:

1. If participants agree and, by agreeing, move closer to a central position or consensus, then the resulting data is more believable.
2. Anonymous responses such as those generated by the Delphi are more likely to lead to reasonable and objective input than are activities of personal conferencing.

Communication/Articulation

Two studies were identified which address the objective of setting up a model for articulation. The model established by Spanbauer (1977) at the secondary and post-secondary levels, was developed after a thorough review of

current literature related to curriculum articulation and following an extensive survey among over 500 vocational educators. The articulation model described consists of sequential activities organized under four major categories: 1) planning, 2) development, 3) implementation, and 4) evaluation. The hypothesis of the model was that articulation between the secondary and post-secondary levels of vocational education will occur best if instructors from each type of institution identify with and communicate about a common goal. The conclusion of the study is that the common goal must have among its components the desire to facilitate the transition of students between secondary and post-secondary institutions, and that it must seek to allow students to move with continuity, without hindrance, through levels of the educational process.

Researchers at Central Texas College (1983) developed a process model for initiating the articulation of secondary and post-secondary competency-based vocational education programs. The process of initiating articulation included initial articulation discussions, administrative action, development of the program, student services, and program implementation. Program evaluation was described as favorable if the outcome of the project was accepted by the community and state accreditation boards. Evaluation was made also from policy statements and plans, instructional materials, student evaluations, and job placement follow-up. The conclusion of the project was the development of a process model for initiating the articulation of secondary and post-secondary competency-based vocational programs. It was further concluded that once institutions formally agreed to articulate, and the programs are institutionalized and implemented, the results are clearly

recognizable. Everyone gains from an articulated program: students, faculty, counselors, staff, and community.

CHAPTER III

METHODS AND PROCEDURES

The project was conducted cooperatively by the Department of Clothing and Textiles and the Home Economics Curriculum Center at Texas Tech University and the Division of Post-Secondary Programs, Department of Occupational Education and Technology, Texas Education Agency. The methods and procedures of the project constituted the following: selection and utilization of the advisory committee, development of the instrument, selection of the participants, data collection utilizing the Delphi technique, and statistical treatment of data; development and distribution of the competency profile; identification of competencies common to both secondary and post-secondary programs; and the articulation and communication of common essential competencies. A summary and description of these procedures follows.

Advisory Committee

The study was assisted by several persons including the advisory committee, the post-secondary vocational home economics education consultant and staff instructors. The advisory group included administrators and instructors representing five colleges and four persons representing business or industry. These advisors assisted in defining the major concepts and subconcepts of clothing and textiles technology programs, clarification of colleges offering clothing and textiles programs, and made suggestions for implementing the project. The advisory committee and the post-secondary vocational home economics consultant, met with the directors of the study in Dallas, Texas, in November, 1984, and in April, 1985. The agenda for the

November meeting included discussion of an overview of the project and identification of major concepts in clothing/textiles technology programs. The April meeting included discussion of the results of the Delphi survey and the development of a plan for articulation to the appropriate audience. Copies of correspondence with the advisory committee and copies of advisory committee agendas are included in Appendix A.

Identification of Common Essential Competencies

Delphi Survey

The Delphi survey was selected for the purpose of achieving consensus of opinions among post-secondary instructors regarding the competencies and subcompetencies needed in clothing/textiles technology programs. The design of the study consisted of constructing the Delphi survey instrument, identifying the population to be surveyed, following the specified procedures for conducting the two Delphi rounds, and analyzing the data.

Development of the Instrument

The Delphi questionnaire in this study was developed to measure consensus on the relative importance of competencies and subcompetencies needed by clothing/textiles technology programs. The initial questionnaire was developed in two phases: 1) identification of competencies and subcompetencies from college catalogs and available outlines of courses in clothing/textiles technology programs, and 2) evaluation by the director of the home economics curriculum center (Texas Tech University), and the post-secondary vocational home economics consultant (Texas Education Agency).

The first step in constructing the Delphi questionnaire was to identify concepts in courses specified for programs in clothing/textiles technology. Second, a review was made of course outlines provided by post-secondary

instructors from participating institutions. The advisory committee furnished supplementary information on identification of concepts. From these sources possible competencies for clothing/textiles technology programs were identified. The competency statements were refined through continuous evaluation, to develop the instrument used in this study: Clothing/Textiles Technology. The questionnaire was divided into two parts. Part I was designed to collect demographic information about the respondent to the questionnaire and was only included in Round I of the Delphi study. Part II was designed for the purpose of competency identification and was divided into 23 major concept areas. Table 1 indicates the major concepts and the number of competencies and subcompetencies under each concept. Copies of Part I and Part II of the questionnaire are included in Appendix C.

A numerical rating scale was developed as the means for obtaining opinions regarding the relative importance of each competency and subcompetency. Five options were provided for obtaining an indication of the degree of importance that individuals attached to each competency and subcompetency. The five options were as follows: unimportant (0), slightly important (1), moderately important (2), important (3), and very important (4).

The questionnaire developed was evaluated by the two experts, previously identified, prior to the distribution of the questionnaire to the survey population. Changes suggested by the experts were incorporated into the final instrument. From this sequential development resulted the questionnaire used in Round I of the Delphi survey.

Population Surveyed

The population surveyed for this study consisted of instructors from 23 post-secondary institutions offering programs in clothing and textiles

TABLE 1

Major Concepts and Number of Competencies as Included in the Clothing/Textiles Technology Questionnaire

Major Concepts	Number Competencies	Number Subcompetencies
Professional Practices	4	6
Merchandising	3	14
Merchandise Planning and Control	6	18
Fashion Communication	4	16
Marketers of Fashion/Textiles	2	3
Product Quality	1	4
Space Planning	5	8
Interior Components	9	24
Drawing Techniques	1	3
Design Communications	1	4
History of Interiors	4	8
Sewing Equipment and Machines	1	5
Upholstery	1	16
Furniture	3	13
Automotive Upholstery and Trim	2	13
Drapery Making	1	13
Textiles	3	9
Apparel Construction	3	17
Apparel/Pattern Design	6	14
Alterations	1	6
History of Costume	4	5
Mass Production	4	27
Computer Application	1	13
	70	259

technology. The participants in the study were identified by the following procedure: colleges identified as having clothing/textiles technology programs were contacted by letter and asked to submit the name and school address of all instructors identified with the clothing/textiles technology programs in their respective schools. The letter and request for soliciting participants in the study are included in Appendix B.

Survey Procedures

The Analysis of Post-Secondary Programs in Clothing/Textiles Technology Delphi Study was conducted between the months of February, 1985, and April, 1985. A total of 100 persons were invited to participate in the Delphi study. Letters to the participants may be found in Appendices C and D.

Round I. The initial Delphi instrument for Round I contained a total of 70 competencies and 259 subcompetencies identified as needed in clothing/textiles technology programs. Respondents were asked to judge the importance of each competency and subcompetency listed under the 23 major concepts. Space for comments was provided for each item. The instrument and background information sheet were sent to participants with an initial letter stating the purpose of the study and a brief explanation of the Delphi technique. An addressed, postage-paid envelope was provided to facilitate prompt responses. Copies of the cover letter, background information sheet, and instrument sent to the survey sample in Round I was sent in February to the 100 persons.

The instrument for Round I was sent in February to the 100 persons comprising the survey sample inviting their participation and requesting a response within 15 days. A follow-up telephone call was made to nonrespondents and an additional five days was allowed for their response. (See Appendix C.) In the time allocated for Round I, 61 responses were

returned. The respondents to Round I provided the basis for the study. Their opinions regarding the importance of the identified competencies and subcompetencies were used as feedback for Round II, as the Delphi process moved the participants toward a consensus.

Although the overall objective of the Delphi technique is to move a group of independent respondents toward consensus, total group consensus is rarely achieved. No set statistical or logical level for drawing a conclusion regarding consensus has been established for the Delphi technique. A Delphi researcher may accept any level of consensus from a simple majority to total agreement. In this study, it was determined that on a five-point scale, considerable difficulty would be encountered in achieving a high level of consensus within a single response level or category. However, strong directional trends appeared likely to occur within two response levels (e.g., important, very important). On this premise, the decision was made to define consensus as 60 percent of the responses falling in two adjacent response categories.

When adjacent cells are collapsed in a 2 x 1 chi square table for the questionnaire, levels needed to achieve a .05 level of significance can be determined. The percent of agreement needed to achieve this level of significance was 60 percent depending on 61 respondents. An agreement level of 67 percent was required for the distribution to be significant at the .01 level. To be significant at the .001 level, 72 percent agreement was statistically required.

Round II. After the analysis of Round I, the 61 respondents were sent the resulting Round II Delphi questionnaire to again indicate their opinions regarding the competence statements on which there was no consensus in Round I. Items on which 60 percent consensus was reached in Round I were eliminated from the second instrument. The number of unresolved competency and subcompetency statements which remained unresolved in the Round II instrument were as follows.

Competencies	Subcompetencies
53	227

The respondents were provided information concerning the mean responses from Round I for each remaining item. Approximate Round I mean responses for each item were indicated on the questionnaire by an asterisk (*). Respondents were advised to consider this information as they made their Round II responses. Respondents were also asked to explain their rating of any item on which their Round II rating was, in their own judgment, significantly above or below the mean or average rating from the previous questionnaire. A cover letter and an addressed, postage-paid return envelope accompanied the Round II instrument to encourage continued participation in the study. Respondents were asked to return the questionnaire by the specified date. Copies of the Round II cover letter and instrument appear in Appendix D.

Responses to Round II included 45 usable returns. At the end of the second Delphi round, 11 competencies and 68 subcompetencies remained on which consensus had not been reached at the 60 percent level. Although consensus was not reached, trends were developed for all 79 items. It was felt that sufficient time was not available to conduct another round. See Appendix E for the list of competencies and subcompetencies not agreed upon following

Round II of the Delphi survey. The consensus levels and mean ratings also are indicated.

Analysis of Survey Data

The demographic data and responses to the Delphi instruments provided the information which was used in analysis related to the hypothesis and research questions on which the study was based. Descriptive statistics were employed to the demographic characteristics of the respondents. Responses to the Delphi instruments were also summarized by descriptive statistics including frequency distributions and mean ratings. The data were analyzed by total responses for each Delphi round.

Competency Profile Development

Analysis of the questionnaires resulted in the identification of those competencies which respondents felt were essential and held in common by each of the clothing/textiles technology programs. The Delphi technique in conjunction with input from all post-secondary clothing/textiles technology instructors resulted in a valid list of essential competencies which formed the basis for the competency profiles. The competency profiles enhanced articulation among the different clothing/textiles technology programs at the post-secondary level. A copy of the developed student profile of essential competencies for each of the curriculum areas identified were distributed to all post-secondary clothing/textiles technology programs in Texas and to secondary vocational area consultants and appropriate secondary Texas Education Agency personnel. See Appendix F for Post-Secondary Clothing/Textiles Technology competency profile.

Identification of Competencies Shared with Secondary Programs

Essential competencies common to both secondary and post-secondary programs in clothing/textiles technology were determined through an analysis of existing secondary vocational curriculum materials and student competency profiles developed through funding from the Texas Education Agency in past years. Competencies which were found to be common to both secondary and post-secondary clothing/textiles technology programs were indicated on the student competency profile developed through this study. See Appendix F. Post-secondary instructors in the clothing/textiles technology programs thus have a clear indication of which essential competencies a student with secondary clothing/ textiles technology training may have. Such information would enhance articulation efforts between secondary and post-secondary institutions.

Articulation of Common Essential Competencies

Project staff in cooperation with the advisory committee, developed a plan for articulation of identified common essential competencies between secondary and post-secondary programs as well as among post-secondary clothing/textiles technology programs. To achieve this objective the following procedures were employed:

1. Literature was reviewed on articulation, focusing on models of articulation which were already in existence.
2. Key personnel in post-secondary programs which had established mechanisms for articulation with secondary institutions were interviewed by telephone. Suggestions for persons to contact were obtained from the post-secondary home economics consultant at the Texas Education Agency.
3. Information gathered in the above activities was presented to the advisory committee for discussion and analysis. The advisory

committee was asked to make recommendations for articulation of clothing technology programs, including suggestions for policies and procedures to be established in formulating articulation agreements between the institutions involved. The advisory committee's recommendations included ways to facilitate articulation for students with special needs, students with limited English proficiency, and non-traditional students.

Improvement of Communication

The project staff and advisory committee attempted to improve communication between faculty in common subject matter programs at the secondary and post-secondary levels. To achieve this objective the following procedures were employed:

1. Literature was reviewed regarding communication among post-secondary faculty, and between secondary and post-secondary programs, teacher information exchange networks, and other related topics.

2. A summary or fact sheet was developed describing a variety of communication ideas which might work for secondary and post-secondary clothing technology faculty.

3. The fact sheet was presented to the advisory committee and to post-secondary clothing technology faculty at their annual inservice workshop and a "brainstorming" session was conducted for workshop participants to recommend communication ideas which would work best for them.

4. With approval from the director of Secondary Vocational Home Economics Education and the Texas Education Agency an opportunity was sought to conduct a similar brainstorming session with secondary clothing technology teachers.

5. A plan was developed for improving communication among post-secondary programs and between secondary and post-secondary programs in clothing/textiles technology based on recommendations from the advisory committee and post-secondary clothing/textiles technology faculty.

CHAPTER IV

RESULTS OF THE STUDY

Data from the responses to the Delphi instrument are presented according to the level of consensus reached in each of the two Delphi rounds. The results are discussed as they relate to the total questionnaire and as they relate to each of the 23 major concepts. See Table 1 for list of concepts. All but 11 competency (16 percent) and 68 subcompetency (26 percent) statements reached agreement by 60 percent of the respondents.

From the analysis of descriptive statistics, student competency profiles of essential common competencies/subcompetencies shared by the five areas of study[1] (fashion merchandising, pattern/fashion design, alterations/tailoring, interior decorating/design, upholstery) within the clothing/textiles technology programs at the post-secondary level were developed. In addition, competencies/subcompetencies common to both secondary and post-secondary programs in clothing/textiles technology were determined. Plans for articulation of identified common essential competencies/subcompetencies and improving communication among post-secondary clothing/textiles technology programs and between the post-secondary and secondary clothing/textiles technology programs were developed.

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[1]The eight original areas of study were redefined into five areas by combining pattern design and fashion design into pattern/fashion design, alterations and tailoring and tailoring into alterations/tailoring, and interior decorating and interior design into interior decorating/design.

Description of Sample

The survey instrument was mailed to 100 clothing/textiles technology instructors in post-secondary institutions in Texas. Table 2 (Appendix E) describes the general characteristics of the respondents to the Delphi questionnaire. A total of 31 post-secondary schools were contacted; eight did not have clothing/textiles technology programs. Instructors from 20 schools responded for a total of 61 participants in Round I and instructors from 19 schools responded for a total of 45 participants in Round II.

The post-secondary instructors responding to the questionnaire represented the following program areas:

Round	Fashion Merchandising	Pattern/ Fashion Design	Alterations/ Tailoring	Interior Decorating/ Design	Upholstery
I	22*	8*	6	11*	19*
II	16*	8*	5	8*	12*

*The total for each round does not reflect the total participants reported because some post-secondary faculty indicated they taught in two areas of study.

With reference to Table 2 (Appendix E), it is noted that the greatest number of the participants held the baccalaureate or masters degree: 25 and 27 percent, respectively. Only two percent of the participants held the doctorate degree. A majority of the participants were 36 years of age and older, with 48 percent being in the age range of 36 to 50, and were women (72 percent).

Thirty-five (57 percent) of the instructors had one to five years of teaching experience at the post-secondary level. Likewise, 32 instructors had one to five years of employment in business/industry.

The enrollment of the colleges participating in the Delphi survey ranged from 0-4999 to over 25000. Fourteen of the post-secondary instructors reported the enrollment of their institution to be over 25,000. The largest number of the instructors taught in post-secondary schools that had an enrollment of 5,000 to 9,999. The size of the five program areas was also reported by each instructor and ranged in enrollment from 25 and under to over 200. The largest program area was upholstery with instructors reporting enrollment of over 200 students. The second largest program, with regard to student enrollment, was fashion merchandising. See Table 2 in Appendix E.

Analysis of Data

Objective 1. To identify common essential competencies taught in post-secondary clothing/textiles technology programs.

Data obtained from responses to the Delphi questionnaire were analyzed for each of the two rounds. Descriptions of the results obtained in each Delphi round are reported in the discussion which follows and in Table 3 (Appendix E). The percentage of respondents reaching the highest level of consensus within two adjacent rating categories and the mean ratings of each competency/subcompetency are reported. Achievement of 60 percent consensus (.05 probability level) as indicated by the omission of a statement from Round II, as shown in Table 3 (Appendix E), follows the established criteria reported in Chapter II. The responses to the clothing/textiles technology Delphi questionnaire included 61 usable responses to Round I and 45 usable responses to Round II. Consensus was achieved by 60 percent or more of the

respondents in Round I for 17 competencies (24 percent) and 31 subcompetencies (12 percent). Following Round II, an additional 42 competencies and 159 subcompetencies were agreed upon leaving only 11 competencies (16 percent) and 68 subcompetencies (26 percent) not reaching consensus at the .05 significance level. See Appendix F for list of competencies/subcompetencies which did not reach consensus by 60 percent of the respondents.

Round I/Round II

Table 3 gives the results of Round I and Round II of the Delphi survey mailed to 100 post-secondary instructors teaching in 23 junior colleges in Texas. Instructors from 20 of the schools responded to Round I. Only one school failed to be represented in Round II.

The 70 competencies and 259 subcompetencies were divided among 23 major concepts. Table 1 gives the total list of concepts identified for post-secondary clothing/textiles technology programs. Seven of the major concepts received full support from the respondents as indicated by 100 percent consensus on the competencies/subcompetencies represented: merchandising, merchandise planning and control, marketers of fashion/textiles, sewing equipment and machines, alterations, history of costume, and computer applications. Those major concepts receiving the lowest consensus level were upholstery (six percent) and history of interiors (17 percent). Within the Upholstery Concept and the History of Interiors Concept only one competency/subcompetency in each was agreed upon: "Prepare and sew welts"[1] ($p = .05$) and "EVALUATE CONTEMPORARY FURNITURE AND DESIGN MOVEMENTS"[2] ($p = .05$).

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[1]Subcompetencies are indicated by lower-case lettering.

[2]Competencies are indicated by upper-case lettering.

The mean ratings for the 23 major concepts ranged from a 3.27 found in Professional Practices to a 1.76 noted in Design Communications. A ranking of the major concepts was determined by listing the highest mean rating observed within each concept. The resulting rank order was 1-professional practices (3.27), 2-merchandising (3.00), 3-apparel construction (2.84), 4-merchandise planning and control (2.76), 5-interior components (2.71), 6-textiles (2.69), 7-mass production (2.62), 8-fashion communication (2.58), 9-history of costume (2.58), 10-upholstery (2.56), 11-sewing equipment and machines (2.56), 12-product quality (2.53), 13-alterations (2.52), 14-apparel/pattern design (2.50), 15-computer applications (2.44), 16-space planning (2.42), 17-drapery making (2.38), 18-marketers of fashion/textiles (2.31), 19-furniture (2.27), 20-auto upholstery and trim (2.04), 21-history of interiors (1.93), 22-drawing techniques (1.91), 23-design communications (1.76). Referring to the above order, 13 of the 23 concepts had at least one competency/subcompetency within the moderately important to important rating scale (2.52 - 3.27) and ten concepts showed at least one competency/subcompetency within the slightly important to moderately important rating scale (1.76 - 2.50). In conclusion it should be noted that 18 of the 23 major concepts reached a 60 percent or above level of consensus based on the percent of competencies/subcompetencies agreed upon within each concept. As a final observation of Table 3, we see that only two major concepts were ranked high both in terms of the rating scale and the level of consensus (merchandising and merchandise planning and control).

Major Concepts

Twenty-three major concepts were identified for the five curriculum areas included in the Delphi survey for post-secondary clothing and textiles occupation programs. The concepts are identified in Table 1. Following is a

discussion of the results of the Delphi survey, Rounds I and II, by the major concepts. The data discussed is presented in Table 3, Appendix E.

Professional Practices. Professional practices included four competencies and six subcompetencies, and obtained the highest mean rating in the survey: mean = 3.27, "ASSESS OWN PROFESSIONALISM," "Demonstrate interpersonal skills appropriate for business environment." The competency, "ASSESS OWN PROFESSIONALISM," showed the highest level of consensus within the concept: 86.9 percent. The range of the mean ratings was 2.38 (moderately important) to 3.27 (important). All of the competencies/subcompetencies representing the major concept of professional practices reached consensus with one exception: "Sketch, photograph, or construct samples in order to communicate ideas" (percent = 53.3 mean = 2.40). Sixty percent of the competencies/subcompetencies reached a significance level of .001, while the remaining three competencies/subcompetencies reached consensus at the .05 level. It appears that the post-secondary instructors considered professional practices to be an important concept in clothing/textiles technology programs (with 90 percent of the competencies/subcompetencies reaching consensus).

Merchandising. Three competencies and 11 subcompetencies made up the major concept of merchandising which showed a consensus level of 100 percent. The greatest number of competencies/subcompetencies were agreed upon at the .05 probability level, with 41 percent being agreed upon at the .001 level. The merchandising concept showed the second highest mean rating of 3.00 (DEVELOP PERSONAL SELLING TECHNIQUES) and first, along with six other major concepts, in a ranking by consensus level. The range of mean ratings within the merchandising concept was 2.38 to 3.00, moderately important to important. The consensus level by range was 60.0 percent (Determine the potential demand

among a store's customers for fashion merchandise) to 78.7 percent (DEVELOP PERSONAL SELLING TECHNIQUES).

Merchandise Planning and Control. Merchandise planning and control consisted of six competencies and 18 subcompetencies. The entire concept of merchandise planning and control reached 100 percent consensus. Seventy-five percent of the competencies/subcompetencies were agreed upon at the .05 probability level. The consensus level range within merchandise planning and control was 60.0 percent (Analyze the buying function and the principles of buying, Buy fashion and staple merchandise and accessories) to 73.3 percent (Plan stock in terms of dollars, Project profit above expenses). The mean ratings were all within the moderately important rating scale, ranging from 2.26 to 2.76.

Fashion Communication. The major concept of fashion communication included four competencies and 16 subcompetencies. The highest mean in this major concept was 2.58 (Predict fashion trends) and the lowest mean was 2.22 (Present commentary). All of the mean ratings in the fashion communication concept were within the moderately important rating scale. The consensus level range was from 57.8 percent (PLAN ADVERTISING TO PROMOTE FASHIONS, Utilize appropriate materials and techniques for display) to 73.3 percent (Select media for fashion advertising). A 90 percent consensus was reached for the major concept of fashion communication. Sixty-five percent of the competencies/subcompetencies reached a significance level of .05, while the subcompetencies remaining reached consensus at .01 (20 percent) and .001 (five percent) level of probability.

Marketers of Fashion/Textiles. Marketers of fashion/textiles concept, which reached a consensus level of 100 percent, included two competencies and

three subcompetencies. The probability level ranged from .05 to .001 with 60 percent of the competencies/sucompetencies significant at the .01 level. The means of the five competencies/subcompetencies ranged from 2.31 (IDENTIFY THE VARIOUS INDUSTRIES INVOLVED IN MARKETING FASHION GOODS) to 2.02 (Name manufacturers of textile fibers, fabrics, leather, and fur). The consensus level range within the marketers of fashion/textiles concept was 77.8 percent (Identify the various industries involved in marketing fashion goods) to 62.2 percent (List manufacturers of women's apparel, menswear, and fashion accessories). Refer to Table 3 (Appendix E).

Product Quality. One competency and four subcompetencies made up the major concept of product quality which showed a consensus level of 80 percent. The competency and subcompetencies were divided equally between the .05 and .01 probability level. Only one subcompetency failed to show an acceptable consensus level (Point out quality standards of home furnishings: 46.7 percent). The subcompetency with the highest level of consensus was "Point out quality standards of non-textile products," with a level of 71.1 percent. The range of mean ratings for product quality was from 2.35 (Point out quality standards of apparel items) to 2.11 (EVALUATE THE IMPACT OF MATERIALS AND CONSTRUCTION ON THE QUALITY AND VALUE OF PRODUCTS). All of the mean ratings were within the moderately important rating.

Space Planning. Space planning included five competencies and eight subcompetencies. "DEVISE FURNITURE ARRANGEMENTS WHICH MEET THE STANDARDS OF COMFORT AND CONVENIENCE, AS WELL AS ATTRACTIVE COMPOSITION" and "Plan an environment with well-defined areas of activity and good traffic lanes" were the competency and subcompetency identified as having the highest mean rating of 2.42. The competency with the lowest mean rating of 2.02 was "EVALUATE THE

TWO BASIC APPROACHES TO SPACE DESIGN: THE CLOSED PLAN AND THE OPEN PLAN." The level of consensus ranged from 77.8 percent (EVALUATE ALL ASPECTS OF INTERIOR SPACE AND ITS RELATIONSHIP TO EXTERIOR SPACE) to 53.3 percent (DEVISE FURNITURE ARRANGEMENTS WHICH MEET THE STANDARDS OF COMFORT AND CONVENIENCE, AS WELL AS ATTRACTIVE COMPOSITION). Only two of the 14 competencies/subcompetencies reached the .001 level of consensus, while 46 percent of the competencies/subcompetencies reached the .05 level of significance. The space planning concept reached a consensus level of 62 percent. Two competencies and three subcompetencies were considered not significant.

Interior Components. The major concept of interior components consisted of nine competencies and 24 subcompetencies. The range of mean ratings was from 2.71 (JUDGE THE NATURE OF COLORS AND HOW THEY COMBINE WITH EACH OTHER; Outline basic color schemes: related and contrasting) to 2.00 (Select accessories for walls, tables and counter tops, floor corners and fireplace mantles). The level of consensus ranged from 75.6 percent (Utilize aspects of lighting: function, aesthetics and health) to 54.5 percent (Estimate textile yardage for upholstery, window treatments, floor coverings, and wall coverings). Ninety-seven percent consensus was reached for the major concept of interior components. Only one subcompetency (stated above) did not reach a consensus level of 60.0 percent or better.

Drawing Techniques. Drawing techniques, including one competency and three subcompetencies, achieved a 75 percent consensus for the entire concept. The subcompetency showing the highest mean rating of 1.91 was "Use quick sketch methods in design presentation." The lowest mean rating of 1.78 was indicated by the competency "MAKE RENDERINGS INCLUDING: PENCIL, PEN AND INK,

WATERCOLOR, PASTELS, COLOR OVERLAYS, SCREENTOPS, OR AIRBRUSH." The above competency, however, achieved the highest level of consensus at 66.7 percent. The lowest level of consensus was 55.6 percent (Draft designs using professional drafting techniques). Only one subcompetency did not achieve the .05 level of probability (Use quick sketch methods in design presentation).

Design Communications. One competency and four subcompetencies were included in the major concept of design communications. The competency "UTILIZE ARCHITECTURAL DRAWINGS," obtained the highest mean of 1.76. The lowest mean, 1.33, was indicated for the subcompetency, "Coordinate the structural system of a building with the interior environmental systems." The range of consensus level was from 60.0 percent (Produce architectural drawings that show all the information needed for interpretation of design, instructions for biddings, and directions for construction; Coordinate the structural system of a building with the interior environmental system) to 46.7 percent (Use vocabulary applied to interior environmental systems: . . .). The respondents indicated an agreement level of 40 percent for design communications at the .05 level of significance. One competency and two subcompetencies did not reach consensus. Data regarding competencies/subcompetencies of design communications are listed in Table 3.

History of Interiors. The results of Round II of the Delphi survey showed only two competencies (EVALUATE CONTEMPORARY FURNITURE AND DESIGN MOVEMENTS; PLAN INTERIOR DESIGN UTILIZING TRADITIONAL STYLES, CONTEMPORARY STYLES, AND HISTORICAL RESTORATION) within the major concept of history of interiors had reached consensus. The consensus level reached on the two competencies was 60.0 percent ($p = .05$). The range of the mean ratings was 1.44 to 1.93 (slightly important). As a final observation, the consensus

level (42.4 - 55.6 percent) following Round I, indicated all of the four competencies and eight subcompetencies would need to be included in Round II.

Sewing Equipment and Machines. The competency and subcompetencies found in the sewing equipment and machines concept were all agreed upon following Round II (60.0 - 64.4 percent consensus level). The highest mean rating of 2.56 was reached on a subcompetency, "Make minor adjustments on the industrial machines such as replacing needles correctly, oiling, and adjusting the tension." The range of mean ratings within the concept indicated a moderately important rating (2.20 - 2.56). One competency and five subcompetencies were included in the sewing equipment and machines major concept.

Upholstery. In the major concept area of upholstery, only one subcompetency (Prepare and sew welts) had reached consensus after Round II of the Delphi survey. This subcompetency achieved a consensus level of 62.2 percent, the lowest level of consensus was 48.9 percent. The range of the mean ratings was 2.02 to 2.56 or moderately important. Included in upholstery were one competency and sixteen subcompetencies.

Furniture. The concept of furniture included three competencies and 13 subcompetencies. Of these sixteen competencies/subcompetencies all but three reached consensus in Round II of the Delphi survey, for 82 percent level of consensus. Thirty-eight percent of the competencies/subcompetencies reaching consensus were at the .05 level of probability. The highest level of consensus was 77.3 (Recognize/identify different kinds of woods). This subcompetency also had the highest mean rating of 2.27 or moderately important. The lowest level of consensus was 53.3 (Use stains, fillers,

varnish, and lacquer, in finishing furniture). The lowest mean rating (1.89) was obtained by the competency "COMPLETE FURNITURE REPAIRS AND RESTYLING."

Automotive Upholstery and Trim. Seven (47 percent) of the 15 competencies/subcompetencies reached consensus following Round I of the Delphi survey. The eight competencies/subcompetencies that were taken into Round II, failed to be agreed upon showing the highest consensus level to be 51.1 percent. The significance level of .05 was indicated for each of the seven competencies/subcompetencies agreed upon. The mean rating for the competency (CUSTOMIZE AUTOMOBILES) that did reach consensus was 1.15 or slightly important. The range of the mean ratings for the 13 subcompetencies was 1.24 to 2.04. The subcompetency (Select carpet appropriate for floor and interior of automobile) receiving the lowest mean rating did reach consensus (60.6 percent) following Round I.

Drapery Making. Three of the 14 competencies/subcompetencies reached consensus after Round II of the Delphi survey. The highest level of consensus was 62.2 percent (UTILIZE APPROPRIATE TECHNIQUES FOR CONSTRUCTION OF DIFFERENT STYLES OF DRAPERIES, CURTAINS, AND HEADINGS). The lowest level of consensus was 46.7 percent (Plan pleats and spaces for drapes). The range of the mean ratings was from 2.38 (Take accurate window measurements for the fit of draperies) to 1.91 (Describe the steps in the construction of window headings). Neither of these subcompetencies reached consensus.

Textiles. Three competencies and nine subcompetencies were included in the major concept of textiles. All competencies/subcompetencies reached consensus in the first and second rounds, except for one subcompetency (55.6 percent). The highest level of consensus was 85.0 (Examine current developments in textiles), which reached consensus in Round I of the survey.

The range of the mean ratings was from 1.76 to 2.69 or slightly important to moderately important. Fifty percent of the competencies/subcompetencies reached the .05 level of probability, 17 percent reached .01, and 25 percent reached .001 for a total of 92 percent consensus.

Apparel Construction. Eighty-five percent of the competencies/subcompetencies reached consensus in Round II of the Delphi survey. Eighty percent of those reaching consensus achieved it at the .05 level of significance. The mean ratings ranged from 2.33 (Use tailoring terminology; Fit and alter commercial suit pattern) to 2.84 (SELECT COLORS, TEXTURES, LINES, DESIGN, AND FABRIC MOST FLATTERING FOR THE INDIVIDUAL). The highest level of consensus reached was 68.9 percent (Exhibit accuracy in pinning, cutting, and marking garment pieces), the lowest level of consensus was 48.9 percent (CONSTRUCT A COMPLETE GARMENT). It is important to note that the respondents did not feel the students needed to actually construct a garment.

Apparel/Pattern Design. The major concept of apparel/pattern design included six competencies and 14 subcompetencies. Ninety-five percent of these competencies/subcompetencies reached consensus. The highest mean rating was 2.50 (Use fashion and production terminology), and the lowest mean rating was 2.02 (DEVELOP AND PRODUCE A LINE). The range of consensus level was 56.8 (Use a variety of sources for design inspiration) to 71.1 (OUTLINE THE PROGRESSION OF FASHIONS FROM FIBER TO CONSUMER; CREATE DESIGNS FOR A FASHION LINE). Sixty-five percent of the competencies/subcompetencies reached the .05 level of significance. Data presented in Table 3 (Appendix E).

Alterations. The major concept of alterations achieved 100 percent consensus after Round II of the Delphi survey. The concept included one competency and six subcompetencies. The competency and five subcompetencies

reached the .05 level of probability. The subcompetency of "Fit garment on individual while maintaining grain" had the highest level of consensus, 72.7 percent. This statement reached the .01 probability level. The range of the mean ratings was from 2.34 (Make alteration markings on garment with chalk or pins) to 2.52 (Select and use appropriate alteration techniques for the following: . . .). The subcompetency, rated 2.52, however, obtained one of the lowest levels of consensus (63.6 percent). The mean ratings were considered moderately important on the mean rating scale.

History of Costume. History of costume was one of several major concepts reaching 100 percent consensus by the respondents in Round II of the Delphi survey. "EVALUATE CURRENT TRENDS IN APPAREL INDUSTRY," was the only competency with a .05 level of significance. This competency, however, also reached the highest mean rating (2.58) but the lowest level of consensus (66.7 percent). "Examine fashion designs and motifs from ancient civilization to 18th century," a subcompetency, had the lowest mean rating of 2.02. The highest level of consensus was reached by the subcompetency, "Research museum and library sources for fashion identification," (72.7 percent). The major concept of history of costume contained four competencies and five subcompetencies. See Table 3 (Appendix E).

Mass Production. Four competencies and 27 subcompetencies were included in the major concept of mass production. Only one subcompetency reached the .001 level of significance. The same subcompetency (Describe the designer's role in the apparel industry) also had the highest level of consensus, 73.3 percent. Two competencies and 10 subcompetencies were considered not significant by the respondents after the second round of the questionnaire. The lowest level of consensus was 53.3 percent reached by one

competency and four subcompetencies. The range of the mean ratings was from 1.76 (Distribute and collect bundles of garment parts and supplies) to 2.62 (Use fashion industry terminology), or slightly important to moderately important. The concept of mass production reached a consensus level of 61 percent. Table 3 (Appendix E) gives the findings of the study.

Computer Applications. Computer applications reached 100 percent consensus by the respondents after Round II of the Delphi survey. One competency and 13 subcompetencies were included in this major concept. The competency and subcompetencies were agreed upon at the .01 level of consensus by 86 percent of the respondents. The two subcompetencies reaching the .001 probability level had the highest mean rating of 2.44 (Use computer systems for merchandising and marketing; Use computer systems for distribution). The subcompetency with the highest level of consensus, 75.6 percent, was "Use computer systems for merchandising and marketing."

Objective 2. To develop and distribute student competency profiles of essential common competencies shared by the eight areas of study within the clothing/textiles technology programs at the post-secondary level.

Following Round II of the Delphi survey, Post-Secondary Clothing/Textiles Technology Competency Identification, 59 competencies and 191 subcompetencies were combined into a competency profile for post-secondary occupational programs in clothing and textiles technology. This number of competencies and subcompetencies represented those which had reached the minimum consensus level of 60.0 percent. Seventy-five competency profiles were produced and distributed to all post-secondary clothing and textiles technology instructors in Texas. In addition, the profiles were sent to secondary vocational area consultants and to appropriate secondary personnel

at the Texas Education Agency. See Appendix G for the competency profile Post-Secondary Clothing/Textiles Technology.

Objective 3. To determine clothing/textiles technology competencies common to both secondary and post-secondary programs.

The student competency profile for post-secondary occupational programs in clothing and textiles technology was developed from those competencies/subcompetencies agreed upon following Round II of the Delphi survey. The post-secondary competency profile was then compared to two secondary occupational home economics education competency profiles: Clothing, Apparel, and Textiles Management, Production, and Services and Home Furnishings and Equipment Management, Production, Services, and one marketing and distributive education profile, Salesperson, Ready-to-Wear, for those competencies common to both secondary and post-secondary programs in clothing and textiles technology. To aid post-secondary personnel in evaluating the potential skills of students who have been enrolled in vocational education programs at the secondary level, the competencies/subcompetencies which are related to required essential elements in secondary vocational education were marked with letters "a" through "e" on the post-secondary competency profile. The letter "a" indicates that the competency or subcompetency should have been addressed in clothing production, management, and services instruction in an occupational home economics education class (38 total). The letter "b" indicates on the profile that the competency or subcompetency should have been covered in home furnishings and equipment management, production, and services instruction in an occupational home economics class (22 total). Three letters, "c," "d," and "e," were used to indicate that the competency or subcompetency should have been covered in training for a ready-to-wear

salesperson in a secondary marketing and distributive education class (24 total). Post-secondary personnel need to obtain a copy of the secondary student's competency profile folder to adequately evaluate the student's vocational education. While students must receive instruction related to their identified occupational objective for each identified required essential element, the student may have received additional instruction related to the student's occupational objective. Students enrolled in cooperative education at the secondary level receive varying on-the-job training experiences depending on their assigned training station. Length of enrollment in vocational education and the student's own interests and abilities are also factors affecting the competencies developed. The level at which the competencies have been achieved also may vary from one student to another. See Appendix G for the identification of competencies common to both secondary and post-secondary programs.

Objective 4. To develop a plan for articulation of identified common essential competencies among post-secondary clothing/textiles technology programs and between the post-secondary and secondary clothing/textiles technology programs.

Common essential competencies for the different areas of the post-secondary clothing/textiles technology programs were identified through analysis of two rounds of questionnaires and use of the Delphi technique. These essential competencies formed the basis for student competency profiles. Copies of the student profile of competencies for each of the curriculum areas identified were distributed to all post-secondary clothing/textile programs in Texas. The use of the competency profiles will be a beginning or a starting place for articulation of the common essential competencies.

Other means of articulation suggested by the advisory council included the following:

1. Send press releases to all Texas post-secondary schools who have a clothing/textile technology program that contains information regarding the common essential competencies;

2. Publish articles on the common essential competencies in professional magazines for junior colleges;

3. Conduct industry and/or association workshops with secondary and post-secondary faculty as participants;

4. Publish and distribute a newsletter among the post-secondary and secondary school with clothing/textiles technical programs; and

5. Develop agreements between post-secondary schools regarding common essential competencies developed in their programs.

A review of literature revealed a research project conducted by Central Texas College (1983). The project entitled "A Process Model for Initiating the Articulation of Secondary Competency-Based Vocational Education Programs" recommended that a cooperative climate must exist before articulation can be initiated. The process of initiating articulation included initial articulation, articulation discussions, administration action, development of program, student services, and program implementation.

Program evaluation was described as favorable if the outcome of the project was accepted by the community and state accreditation boards. Another conclusion of the Central Texas College Project (1983) was that once institutions formally agreed to articulate, and the programs were institutionalized and implemented, the results are clearly recognizable. Evaluations can also be made from policy statement and plans, instructional materials, student evaluations and job placement follow-up.

A study in Wisconsin entitled "Bridging the Gap: A Model for Articulation Between Secondary and Post-Secondary Vocational Educators in

Wisconsin" (Spanbauer, 1977) revealed that articulation between the secondary and post-secondary levels of vocational education occurred best when instructors from each type of institution identified with and communicated about a common goal. Another philosophy of the study was that articulation could not succeed without the commitment of the educators who are involved in the process. If the articulation is going to be a success there is a need for continuous in-service activities to develop new skills in analyzing survey data, writing instructional objectives, preparing instructional materials, and evaluating student performance. Also communications must be maintained among the secondary and post-secondary administrators in order that all are informed concerning the progress of the project.

Spanbauer (1977) stated that the articulation process is never finalized. Curriculums and procedures need a continuing review and revision. Communication among instructors in areas of clothing/textiles technology programs must be established and kept open. For clothing/textiles programs to be successful at both levels there must be a fostering of proper attitudes by all educators toward the general concept of articulation.

Objective 5. To develop a plan or model for improving communication among the post-secondary clothing/textiles technology programs and between post-secondary clothing/textiles and secondary clothing/textiles technology programs.

Communication can best take place in a cooperative climate. This climate is necessary for secondary and post-secondary institutions to begin the interaction required to make articulation occur. A study completed in 1983 by Central Texas College concluded that pre-conditions must exist in order to achieve a successfully articulated competency-based vocational education program. The pre-conditions are:

1. An initial desire to articulate vocational education programs exhibited by both secondary and post-secondary institutions;

2. A willingness to investigate the possibilities of an articulated educational program with open-mindedness;

3. Making articulation a top priority at both secondary and post-secondary institutions;

4. A team effort and positive attitude from all involved in the articulation process; and

5. A history of sound educational and management practices.

Faculty from both levels of institutions must be directly involved in planning and implementation of the clothing/textiles technology programs. Educators of both institutions should be committed to competency-based instruction. The post-secondary schools need to have a clear definition of the secondary school programs. Educators at both levels need to understand how each school system functions in the total program and work together as equals though at different levels. Program coordinating and planning between secondary and post-secondary institutions are necessary so that a student may progress from one level of training to the next level without experiencing unnecessary gaps or overlaps in a general program of study.

The advisory council offered suggestions for improving communication among the post-secondary clothing/textiles technology programs and between secondary and post-secondary programs. Following is a suggested plan for communication.

1. Community colleges must keep the secondary schools appraised of curriculum changes.

2. Brochures and posters can be used to publicize the programs by both secondary and post-secondary institutions.

3. Post-secondary schools should provide advance placement, limited credit by examination and provision for scholarships for secondary schools.

4. Secondary school faculty should serve on advisory councils for post-secondary schools and post-secondary educators should serve on advisory councils for the secondary schools.

5. Post-secondary schools could participate in an "adopt a school program."

6. Post-secondary and secondary educators should participate in joint curriculum development efforts and an exchange of information regarding textbooks, course outlines and other materials indicative of course content and scope.

7. Post-secondary schools could prepare video tapes on careers in the local area, develop recruitment materials and participate in different sections of professional organization conferences.

CHAPTER V

CONCLUSIONS AND IMPLICATIONS

The data for the study were obtained from a Delphi questionnaire received from 61 persons in the first Delphi round, 45 persons in Round II. These persons represented (1) instructors from 20 post-secondary institutions offering programs in clothing and textiles technology, and (2) program coordinators in post-secondary clothing/textiles technology programs in Texas.

Responses to the Delphi questionnaire were analyzed and items which had reached consensus were eliminated from Round II. The items which failed to reach consensus are listed in Appendix F. Based upon the analysis of the competency/subcompetency data the following conclusions were drawn.

Conclusions

1. Seventy-six percent of the competencies/subcompetencies reached consensus by the end of Round II at the .05 level of significance or beyond, indicating the general concurrence of participants in their rating of the competencies/subcompetencies identified for post-secondary programs in clothing/textiles technology.

2. Seven of the 23 major concepts identified in the clothing/textiles curriculum areas achieved 100 percent consensus. Because of this high level of agreement, it can be concluded that the participants, regardless of their teaching area, were united in their assessment of the importance of the competencies/subcompetencies included in each of the seven concepts that were totally agreed upon (merchandising, merchandise planning and control,

marketers of fashion/textiles, sewing equipment and machines, alterations, history of costume, computer applications).

3. The seven concepts achieving 100 percent consensus were rated moderately important to important. It would seem that the post-secondary instructors not only agreed on the concepts, but felt the competencies/subcompetencies representing the seven concepts should be considered within the scope of clothing and textiles technology programs.

4. Competencies/subcompetencies within the concepts of professional practices and merchandising produced the highest mean ratings, pointing to the importance of these concepts to students enrolled in post-secondary clothing/textiles programs.

5. The .05 probability level or 60-66 percent consensus was indicated for 61 percent of those competencies/subcompetencies agreed upon after Round II. This finding is indicative of the diverse curriculum areas included in the post-secondary clothing/textiles program.

6. Group consensus was noted at 60 percent or above, signifying that five of the 23 major concepts were not agreed upon by the participants (automotive upholstery and trim, design communication, drapery making, history of interiors, upholstery). The obvious conclusion is that the ratings of the groups were so assorted that consensus was impossible. The data does support trends toward agreement for drapery making, history of interiors, and upholstery. Each of these major concepts probably would have reached consensus, if time had permitted another round of the survey. Eight of the 12 competencies/subcompetencies were within the 50-59 percent level of consensus for history of interiors; whereas, upholstery had 14 of its 17 competencies/subcompetencies within a consensus level of 50 to 59 percent. Drapery making also

showed a tendency toward consensus: 10 of the 14 competencies/subcompetencies were in the 50-59 percent consensus range following Round II.

7. A student competency profile of the 250 essential common competencies/subcompetencies identified for the five areas of study within the post-secondary clothing/textiles technology programs was developed for distribution. Availability of the competency profile will serve to improve instructor and student understanding of clothing/textiles technology programs at the post-secondary level.

8. Of the 59 competencies/191 subcompetencies which reached consensus, some were identified as being directly related to the competencies and/or essential elements identified for five of the secondary vocational education occupational program areas. Competencies/subcompetencies were related to instruction provided in two occupational areas of occupational home economics education: Clothing, Apparel, and Textiles Management, Production, and Services and Home Furnishings and Equipment Management, Production, and Services. In addition, competencies/subcompetencies were found to relate to three areas of marketing and distributive education. The results of the comparison between the secondary and post-secondary competencies/subcompetencies within the clothing/textiles technology programs indicates parallelism between the two programs. Training related to additional competencies/subcompetencies may be provided in individual secondary vocational education programs and/or to individual students enrolled in vocational programs. Analysis of each entering student's competency profile will be necessary to determine the extent of training.

9. Articulation is essential to the successful implementation of any program of study. Findings from this Delphi survey indicate common essential competencies/subcompetencies between secondary and post-secondary programs in

clothing/textiles technology. Identification of these common competencies/subcompetencies will allow students to progress through their education in a continuous manner to gainful employment.

10. Communication between secondary and post-secondary instructors and institutions will increase due to the awareness of identified common essential competencies/subcompetencies, and, in turn, lead to an articulation plan for secondary and post-secondary programs in clothing/textiles technology.

Implications

The knowledge of competencies/subcompetencies in clothing/textiles technology programs at the post-secondary level will foster a better understanding of these programs by the secondary instructor, post-secondary instructor, and administrator of such programs. In addition, the opportunity for communication in regard to clothing/textiles technology post-secondary programs, will be expanded among instructors and administrators at post-secondary institutions and between post-secondary and secondary institutions. Curriculum revisions based on identified competencies/subcompetencies for clothing/textiles technology post-secondary programs, also will result in program status which in turn will provide quality instruction for future students.

BIBLIOGRAPHY

Central Texas College. (1983). A process model for initiating the articulation of secondary and post-secondary competency-based vocational education programs. Austin, Texas: Texas Education Agency.

Cook, F. S., Neuhauser, C. L., and Richie, R. C. (1973). A working model of competency-based teacher education system. Detroit, Michigan: Wayne State University, Department of Vocational and Applied Arts Education.

Dalkey, N. C. (1972). The delphi method: an experimental study of group opinion. In N. C. Dalkey et al. (Eds.), Delphi and decision making. Lexington, Massachusetts: D. C. Heath and Company.

DeVaughn, Z. F. J. (1974). Competencies needed by vocational and technical education teachers as rated by selected groups. Unpublished doctoral dissertation, Oklahoma State University, Stillwater.

Gale, L E., and Pol, G. (1975). Competence: a definition and conceptual scheme. Educational Technology, 15, 19-25.

Hall, G. E., and Jones, H. L. (1976). Competency-based education: a process for the improvement of education. Englewood Cliffs, New Jersey: Prentice Hall, Inc.

Helmer, O., and Rescher, N. (1959, October). On the epistemology of the inexact sciences. Management Science, 6, 25-52.

Linstone, H. A., and Turoff, M. (1975). Introduction. In H. A. Linstone and M. Truoff (Eds.), The delphi method: techniques and applications. Reading, Massachusetts: Addison-Wesley.

Monjon, S. V., and Gasner, S. M. (1979). Critical issues in competency-based education. New York: Pergamon Press.

National Advisory Council on Education Professions Development. (1976). Competency-based teacher education: toward a consensus. Columbus, Ohio: Ohio State University, Center for Vocational Education.

Parker, J. T., and Taylor, P. G. (1980). The delphi survey: CBAE through the eyes of leading educators. Belmont, California: Fearon Pitman Publishers.

Rasp, A., Jr. (1973, July). Delphi: a decision-maker's dream. Nation's School, 92, 29-32.

Smith, S. A. (1980). Selection and application of competencies for a college-level beginning interior design course. Unpublished doctoral dissertation, Texas Tech University, Lubbock.

Spanbauer, S. (1977). Bridging the gap: a model for articulation between secondary and post-secondary vocational educators in Wisconsin. Appleton, Wisconsin: Fox Valley Technical Institute, 1-43.

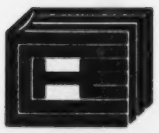
Weaver, W. T. (1971, January). The delphi forecasting method. Phi Delta Kappan, 52, 29-32.

Weinstein, J., and Houston, R. (1974, Fall). Competency based education. Jewish Education, 43, 21-26.

Appendix A

Advisory Council Correspondence and

Meeting Agendas



HOME ECONOMICS CURRICULUM CENTER
Texas Tech University
P.O. Box 4067
Lubbock, Texas 79409-4067
(806) 742-3028

October 11, 1984

Dear

This year the Home Economics Curriculum Center is conducting an analysis of post-secondary clothing/textiles technology programs. This research project was requested and funded by the Research Coordinating Unit, Texas Education Agency. The primary purpose of the project is to identify the competencies commonly taught in post-secondary clothing/textiles technology programs and to communicate this content among post-secondary programs and between post-secondary and secondary clothing/textiles programs.

An element essential to our success will be the active participation of a ten-member advisory committee. We would like to invite Marcy Thorson, Instructor of Fashion Design, to serve on this committee. We feel that this instructor's knowledge and experience would make a valuable contribution to the project. Participation as an advisory committee member will involve two meetings plus an occasional request for input about the project by mail or phone. Each instructor participating will also select a business/industry representative familiar with their program to participate on the advisory committee to ensure quality business/industry input.

The first meeting will be Monday, November 12, 1984 from 9:00 a.m.-12:00 p.m. in Room 908 at El Centro College, Main and Lamar Streets, Dallas, Texas. The project will pay travel expenses according to Texas Education Agency's travel regulations.

It is very important that post-secondary instructors be involved in the project to ensure that the results will be of maximum benefit to all of the post-secondary programs throughout the state.

Please let me know by October 22, if Ms. Thorson will be able to participate so we can send the materials needed for the advisory committee meeting.

Sincerely,

Linda R. Glosson
Project Director

Patricia Horridge
Project Co-Director

Myra B. Timmons
Project Co-Director

LB/med

cc: Thorson

Advisory Council

AGENDA

An Analysis of Post-Secondary Programs
In Clothing/Textiles Technology

Funded by: The Texas Education Agency
Department of Occupational Education
and Technology
Research Coordinating Unit

Place: Room 908
El Centro College
Main and Lamar Streets
Dallas, Texas 75202

Date: November 12, 1984

Time: 9:00 a.m.

9:00 - Introductions

Overview of project

Identification of Competency Statements

Development of Delphi Instruments

Delphi procedures

Implications for Articulation

12:00 - Adjourn

HOME ECONOMICS CURRICULUM CENTER
Texas Tech University
P.O. Box 4067
Lubbock, Texas 79409-4067
(806) 742-3028

March 29, 1985

Dear

It's almost that time! The advisory committee for the Texas Education Agency project, An Analysis of Post-Secondary Programs in Clothing/Textiles Technology will meet as follows:

DATE: Monday, April 15
TIME: 9:00 - 12:00 a.m.
PLACE: Room 908
El Centro College
Main and Lamar Streets
Dallas, Texas 75202

As before, the project will pay your travel expenses according to the Texas Education Agency's travel regulations.

The purpose of the meeting will be to review the progress of the project. The results of the first Delphi round will be reported. The group will discuss implications of items on which consensus has been reached as well as possible implications of items which have not yet reached agreement.

We will discuss possibilities for articulation of the identified competencies between secondary and post-secondary programs as well as among post-secondary programs. We will also discuss ways to facilitate communication between these groups.

The committee's input at the November meeting has greatly facilitated this project. Your participation in the April 15 meeting will be even more important.

Please let us know if you can be a part of this important meeting.

Sincerely,

Linda R. Glosson
Project Director

Patricia Horridge
Project Co-Director

Myra B. Timmons
Project Co-Director

Advisory Council

AGENDA

An Analysis of Post-Secondary Programs
In Clothing/Textiles Technology

Funded by: The Texas Education Agency
Department of Occupational Education
and Technology
Research Coordinating Unit

Place: Room 908
El Centro College
Main and Lamar Streets
Dallas, Texas 75202

Date: April 15, 1985

Time: 9:00 a.m.

9:00 - Opening Remarks

Results of Delphi Round I

Implications of Delphi Responses

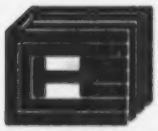
Suggestions for Articulations

Suggestions for Facilitating Communication

12:00 - Adjourn

Appendix B

Letter Soliciting Participants



HOME ECONOMICS CURRICULUM CENTER
Texas Tech University
P.O. Box 4067
Lubbock, Texas 79409-4067
(806) 742-3028

October 15, 1984

Dear

Texas Tech University has been awarded a grant to study post-secondary occupational programs in clothing/textiles technology in order to facilitate articulation and communication between clothing/textiles technology programs at the secondary and post-secondary levels. The principle objectives are:

1. to identify common essential competencies taught in post-secondary clothing/textiles programs,

2. to determine clothing/textiles clothing competencies common to both secondary and post-secondary programs, and

3. to develop a plan for articulation of identified common essential competencies among post-secondary clothing/textiles technology programs and between the post-secondary and secondary clothing/ textiles technology programs.

As directors of this project, we feel that the findings of the study will benefit you as an instructor, as well as your institution. To successfully complete the objectives of the study, we need your assistance. To insure your institution's input, please send the following materials by NOVEMBER 15, 1984.

1. Instructor and Instructional Area Information form which is enclosed for your reply. Should additional forms be needed, please duplicate.

2. Course outlines and assignments (such as projects, field experiences, etc.) and any student competencies or objectives that you feel will assist us in identifying competencies taught in post-secondary clothing/textiles technology programs.

We realize that these activities will require considerable effort on your part. However, we also know that your input is essential if we are to adequately study and determine competencies for post-secondary occupational programs in clothing/textiles technology. Thank you in advance for your reply.

Sincerely yours,

Linda R. Glosson	Patricia Horridge	Myra B. Timmons
Project Director	Project Co-Director	Project Co-Director

Duplicate if more
than six instructors

INSTRUCTOR AND INSTRUCTIONAL AREA INFORMATION
TEXAS POST-SECONDARY INSTITUTIONS

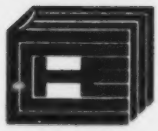
Please include all of the names of instructors that are teaching in a clothing/textiles technology instructional area. If a person teaches in more than one instructional area, please list in each area taught. The instructional areas are as follows:

Fashion Merchandising	Tailoring	Upholstery
Interior Decorating	Pattern Design	Alterations and Tailoring
Interior Design	Fashion Design	Sewing Machine Repair

Instructional Area_____	Instructional Area_____
Instructor's Name_____	Instructor's Name_____
Position/Title_____	Position/Title_____
School Address_____	School Address_____
_____	_____
City and Zipcode_____	City and Zipcode_____
Office Phone ( )_____	Office Phone ( )_____
Instructional Area_____	Instructional Area_____
Instructor's Name_____	Instructor's Name_____
Position/Title_____	Position/Title_____
School Address_____	School Address_____
_____	_____
City and Zipcode_____	City and Zipcode_____
Office Phone ( )_____	Office Phone ( )_____
Instructional Area_____	Instructional Area_____
Instructor's Name_____	Instructor's Name_____
Position/Title_____	Position/Title_____
School Address_____	School Address_____
_____	_____
City and Zipcode_____	City and Zipcode_____
Office Phone ( )_____	Office Phone ( )_____

Appendix C

Round I Instrument and Correspondence



HOME ECONOMICS CURRICULUM CENTER
Texas Tech University
P.O. Box 4067
Lubbock, Texas 79409-4067
(806) 742-3028

PLEASE MAIL BY
February 22, 1985

February 8, 1985

Dear

Thank you for your willingness to participate in this study (sponsored by the Texas Education Agency) to improve the post-secondary programs in clothing/textiles technology. The primary purpose of the study is to identify common essential competencies taught in post-secondary clothing/textiles technology programs. The program areas included in clothing/textiles technology are:

Fashion Merchandising	Interior Design
Fashion Design	Alterations and Tailoring
Pattern Design	Tailoring
Interior Decorating	Upholstery

The enclosed questionnaire is being sent to selected educators in the post-secondary clothing/textiles technology areas. Through use of a DELPHI procedure, these educators will be encouraged to reach agreement regarding the importance of the competencies identified. For each subsequent round, the items for which agreement has been reached will be dropped from the questionnaire. Two or more rounds are usually required for consensus to be reached regarding most of the items. Your participation in each round of the procedure is extremely important to ensure valid results.

Please respond to each item on the enclosed questionnaire. Add comments as you feel the need. Return the questionnaire as directed.

Thank you very much for your assistance with this important project. The results will be used by post-secondary schools across the state in improving their clothing/textiles technology programs.

Sincerely yours,

Linda R. Glosson	Patricia Horridge	Myra B. Timmons
Project Director	Project Co-Director	Project Co-Director

Name: _____ Institution: _____

PART I: GENERAL INFORMATION

DIRECTIONS: Please provide the following information about yourself for use in statistically analyzing the data resulting from this survey.

1. Education: (Check highest level obtained.)

____High School Graduate	____Bachelor's Degree
____Certificate Program	____Master's Degree
____Associate Degree	____Doctorate Degree

2. Post Secondary Teaching Assignment(s): (How many years have you taught in each area?)

____Fashion Merchandising	____Interior Design
____Fashion Design	____Alterations and Tailoring
____Pattern Design	____Tailoring
____Interior Decorating	____Upholstery

3. Enrollment: (How many students were enrolled Fall, 1984)

____College

Program Areas

____Fashion Merchandising	____Interior Design
____Fashion Design	____Alterations and Tailoring
____Pattern Design	____Tailoring
____Interior Decorating	____Upholstery

4. Present Age:

____20-35 years	____51-65 years
____36-50 years	____66 years or older

5. Sex:

____Male ____Female

6. Have you ever had business or industry employment related to one or more of the subject areas listed below? (If yes, indicate number of years.)

____Fashion Merchandising	____Interior Design
____Fashion Design	____Alterations and Tailoring
____Pattern Design	____Tailoring
____Interior Decorating	____Upholstery

PART II: POST-SECONDARY CLOTHING/TEXTILES TECHNOLOGY COMPETENCY IDENTIFICATION

Listed below are competencies which post-secondary clothing/textiles technology programs may develop in the courses offered.

DIRECTIONS:

1. Please read each of the competencies listed below.
2. Judge how important you feel it would be to develop each competency in a post-secondary clothing/textiles technology program, using the rating scale below. **Be sure to respond to each competency listed.**
3. If you have any comments regarding individual competencies, please make them in the space provided to the right of each.

RATING SCALE:

0 = Not Important (NI)
1 = Slightly Important (SI)
2 = Moderately Important (MI)
3 = Important (I)
4 = Very Important (VI)

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
PROFESSIONAL PRACTICES						
Assess own professionalism.	0	1	2	3	4	
1. Demonstrate interpersonal skills appropriate for business environment.	0	1	2	3	4	
2. Exhibit personal grooming necessary for career success.	0	1	2	3	4	
3. Develop wardrobe suitable for a professional image.	0	1	2	3	4	
Evaluate career opportunities.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
Prepare a professional portfolio.	0	1	2	3	4	
4. Sketch, photograph, or construct samples in order to communicate ideas.	0	1	2	3	4	
5. Assemble professional portfolio or exhibit.	0	1	2	3	4	
6. Present portfolio or exhibit.	0	1	2	3	4	
Perform appropriate work skills.	0	1	2	3	4	
MERCHANDISING						
Develop personal selling techniques.	0	1	2	3	4	
7. Demonstrate fashion knowledge on selling floor.	0	1	2	3	4	
8. Use interpersonal skills on the selling floor.	0	1	2	3	4	
9. Develop insight into customer buying motivation.	0	1	2	3	4	
Evaluate techniques in selling fashion apparel and accessories in retail and wholesale markets.	0	1	2	3	4	
10. Use fashion terminology.	0	1	2	3	4	
11. Predict target customer.	0	1	2	3	4	
12. Develop training and motivational program for sales staff.	0	1	2	3	4	
Evaluate the fashion industry with regard to its scope and economic importance.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
13. Demonstrate a working knowledge of production in the fashion industry.	0	1	2	3	4	
14. Select retail fashion distribution techniques appropriate for the interests and lifestyles of firm's target customer.	0	1	2	3	4	
15. Determine the consumption of goods within the fashion industry.	0	1	2	3	4	
16. Utilize demographic and psychographic data on the consumer to develop fashion products and services.	0	1	2	3	4	
17. Relate consumer preferences to what goods should be included in a retailer's assortment, in what quantities, at what time, and at what prices.	0	1	2	3	4	
18. Determine the potential demand among a store's customers for fashion merchandise.	0	1	2	3	4	
19. Analyze customer acceptance of merchandise.	0	1	2	3	4	
20. Analyze merchandise in light of customer buying motives.	0	1	2	3	4	
MERCHANDISE PLANNING AND CONTROL						
Evaluate merchandise planning and control: sales and inventories.	0	1	2	3	4	
21. Analyze merchandise by department and classification.	0	1	2	3	4	
22. Develop short- and long-range sales plans.	0	1	2	3	4	
23. Plan stock in terms of dollars.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
24. Develop a seasonal merchandise plan and an open-to-buy plan.	0	1	2	3	4	
Evaluate planning and control of merchandise.	0	1	2	3	4	
25. Analyze unit control methods.	0	1	2	3	4	
26. Plan and control staple stocks.	0	1	2	3	4	
27. Plan and control fashion stocks.	0	1	2	3	4	
Assess the principles and procedures for profitable manipulation of merchandise.	0	1	2	3	4	
28. Examine profit as percent of sales and percent of net worth.	0	1	2	3	4	
29. Project profit above expenses.	0	1	2	3	4	
Price merchandise.	0	1	2	3	4	
30. Determine elements in merchandise markup.	0	1	2	3	4	
31. Examine the pricing of individual items.	0	1	2	3	4	
32. Analyze competitive pricing policies.	0	1	2	3	4	
33. Plan appropriate price lines.	0	1	2	3	4	
34. Use markdowns to improve the sale of a product.	0	1	2	3	4	
Conduct unit control and/or physical inventory.	0	1	2	3	4	
Plan inventory valuation of merchandise: cost method or retail method.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
35. Analyze the buying function and the principles of buying.	0	1	2	3	4	
36. Locate buying information.	0	1	2	3	4	
37. Use effective purchasing fundamentals.	0	1	2	3	4	
38. Buy fashion and staple merchandise and accessories.	0	1	2	3	4	
FASHION COMMUNICATION						
Evaluate fashion promotion.	0	1	2	3	4	
39. Implement retail sales promotion activities.	0	1	2	3	4	
40. Plan sales promotion activities to supplement and complement personal selling.	0	1	2	3	4	
41. Predict fashion trends.	0	1	2	3	4	
Plan advertising to promote fashions.	0	1	2	3	4	
42. Name types of advertising available for promoting fashions.	0	1	2	3	4	
43. Describe characteristics of an effective advertisement.	0	1	2	3	4	
44. Select media for fashion advertising.	0	1	2	3	4	
45. Develop a fashion advertising campaign.	0	1	2	3	4	
Develop an effective merchandising display.	0	1	2	3	4	
46. Identify types of display including: interior display, exterior display, window display, and seasonal or special display.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
47. Develop window and interior displays.	0	1	2	3	4	
48. Solve technical and mechanical problems in display.	0	1	2	3	4	
49. Utilize appropriate materials and techniques.	0	1	2	3	4	
Plan, produce, and organize a fashion show.	0	1	2	3	4	
50. Select and coordinate merchandise for a fashion show.	0	1	2	3	4	
51. Write a script for a fashion show.	0	1	2	3	4	
52. Plan set design, choreography, publicity, and staging.	0	1	2	3	4	
53. Manage a fashion show.	0	1	2	3	4	
54. Present commentary.	0	1	2	3	4	
MARKETERS OF FASHION/TEXTILES						
Identify the various industries involved in marketing fashion goods.	0	1	2	3	4	
55. Name manufacturers of textile fibers, fabrics, leather, and fur.	0	1	2	3	4	
56. List manufacturers of women's apparel, menswear, and fashion accessories.	0	1	2	3	4	
57. Name foreign fashion market centers.	0	1	2	3	4	
Evaluate the services of auxiliary enterprises (advisors, sources of information, and promoters of fashion news) in the fashion industry.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
PRODUCT QUALITY						
Evaluate the impact of materials and construction on the quality and value of products.	0	1	2	3	4	
58. Point out quality standards of home furnishings.	0	1	2	3	4	
59. Point out quality standards of accessory items.	0	1	2	3	4	
60. Point out quality standards of apparel items.	0	1	2	3	4	
61. Point out quality standards of non-textile products.	0	1	2	3	4	
SPACE PLANNING						
Evaluate all aspects of interior space and its relationship to exterior space.	0	1	2	3	4	
62. Analyze the two basic types of design: structural and decorative.	0	1	2	3	4	
63. Compare the principles and elements of design including space, line, shape, form, texture, and color.	0	1	2	3	4	
Evaluate the two basic approaches to space design: the closed plan and the open plan.	0	1	2	3	4	
64. Apply basic interior design principles to furniture layouts and space distribution.	0	1	2	3	4	
65. Plan an environment with well-defined areas of activity and good traffic lanes.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
Devise furniture arrangements which meet the standards of comfort and convenience, as well as attractive composition.	0	1	2	3	4	
Design residential interiors using appropriate materials, methods, and professional procedures.	0	1	2	3	4	
66. Plan residential interiors with emphasis on space planning, furniture, color, and lighting.	0	1	2	3	4	
67. Plan residential interiors using both traditional and contemporary interiors.	0	1	2	3	4	
Design commercial interiors with emphasis on space, function, lighting materials, aesthetics, and legal consideration.	0	1	2	3	4	
68. Examine the latest trends and materials used in commercial interiors.	0	1	2	3	4	
69. Plan a barrier-free interior for a commercial space.	0	1	2	3	4	
INTERIOR COMPONENTS						
Judge the nature of colors and how they combine with each other.	0	1	2	3	4	
70. Relate the impact of color to mood, temperament, and behaviors.	0	1	2	3	4	
71. Examine the three-dimensions or forms of color (hue, value, and intensity).	0	1	2	3	4	
72. Analyze the basic color theories.	0	1	2	3	4	
73. Outline basic color schemes: related and contrasting.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
74. Determine the effects of surroundings on color.	0	1	2	3	4	
75. Apply color theory.	0	1	2	3	4	
Assess the techniques used in creating fabrics and hangings.	0	1	2	3	4	
Combine fabrics that complement the mood and style created in a room.	0	1	2	3	4	
76. Utilize fabrics appropriate to life-styles and activities.	0	1	2	3	4	
77. Estimate textile yardage for upholstery, window treatments, floor coverings, and wall coverings.	0	1	2	3	4	
Evaluate the value and function of windows and their appropriate treatment.	0	1	2	3	4	
78. Select window treatments that are functional and appropriate in style.	0	1	2	3	4	
79. Sketch the window treatment, show fabric or other material samples, and select picture of the appropriate furnishing.	0	1	2	3	4	
Select appropriate lighting for interior design.	0	1	2	3	4	
80. Utilize aspects of lighting (function, aesthetics, and health).	0	1	2	3	4	
81. Determine methods of lighting throughout an interior space: architectural and nonarchitectural.	0	1	2	3	4	
82. Use natural daylight and artificial illumination in lighting plans.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
83. Plan lighting for commercial and residential interiors.	0	1	2	3	4	
Select appropriate floor coverings according to warmth, comfort, and beauty.	0	1	2	3	4	
84. Distinguish between the two categories of floor coverings: soft and hard.	0	1	2	3	4	
85. Select and use hard floor coverings: wood, masonry, vinyl, asphalt, rubber, cork, and mosaic tiles.	0	1	2	3	4	
86. Analyze rug and carpet fibers and construction.	0	1	2	3	4	
87. Select and use soft floor coverings: rugs and carpets.	0	1	2	3	4	
Select appropriate wall treatments.	0	1	2	3	4	
88. Point out the advantages and disadvantages of various wall treatments.	0	1	2	3	4	
89. Plan wall coverings for commercial and residential interiors.	0	1	2	3	4	
Evaluate materials used in interior construction for their particular attributes.	0	1	2	3	4	
Select accessories that reflect interests and tastes of the client.	0	1	2	3	4	
90. Select functional accessories.	0	1	2	3	4	
91. Select accessories for walls, tables and counter tops, floor corners, and fireplace mantles.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
92. Select decorative accessories to emphasize an area of the home or commercial work space.	0	1	2	3	4	
93. Plan an accessory grouping using the design principles of scale, proportion, balance, rhythm, emphasis, variety, and unity.	0	1	2	3	4	
DRAWING TECHNIQUES						
Make renderings including: pencil, pen and ink, watercolor, pastels, color overlays, screentops, or airbrush.	0	1	2	3	4	
94. Use quick sketch methods in design presentation.	0	1	2	3	4	
95. Draft designs using professional drafting techniques.	0	1	2	3	4	
96. Use appropriate techniques for dimensioning and line weights.	0	1	2	3	4	
DESIGN COMMUNICATIONS						
Utilize architectural drawings.	0	1	2	3	4	
97. Use architectural terminology.	0	1	2	3	4	
98. Produce architectural drawings that show all the information needed for interpretation of design, instructions for biddings, and directions for construction.	0	1	2	3	4	
99. Use vocabulary applied to interior environmental systems: plumbing, heating, ventilating, electrical wiring, acoustics, and alternate energy sources.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
100. Coordinate the structural system of a building with the interior environmental system.	0	1	2	3	4	
HISTORY OF INTERIORS						
Analyze the history and profession of interior design.	0	1	2	3	4	
101. Examine architecture and decorative arts from post-Renaissance to the Industrial Revolution.	0	1	2	3	4	
102. Examine architecture and decorative arts from the Industrial Revolution to the present.	0	1	2	3	4	
103. Analyze the influence of social and economic conditions on styles of furniture, accessories and fabrics, and background treatments.	0	1	2	3	4	
104. Determine architectural styles and their development in France, England, and America.	0	1	2	3	4	
105. Evaluate art movements and their influence on interior designs.	0	1	2	3	4	
Appraise contributions of interior designers, architects, and furniture designers.	0	1	2	3	4	
Evaluate contemporary furniture and design movements.	0	1	2	3	4	
106. Present furniture that evolved from each contemporary design movement.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
107. Evidence knowledge of contemporary interior planning, design materials, and accessories.	0	1	2	3	4	
108. Determine effect of contemporary interiors on modern design in home environments today.	0	1	2	3	4	
Plan interior design utilizing traditional styles, contemporary styles, and historical restoration.	0	1	2	3	4	
SEWING EQUIPMENT AND MACHINES						
Select, use, and maintain sewing and pressing equipment.	0	1	2	3	4	
109. Select and purchase sewing supplies, notions, and sewing and pressing equipment.	0	1	2	3	4	
110. Use appropriate pressing equipment such as point presser, needle board, press mit, press ham, tailor's iron, and clapper.	0	1	2	3	4	
111. Thread, adjust, operate, and maintain different brands of domestic sewing machine.	0	1	2	3	4	
112. Thread, adjust, and safely operate the overlock, lockstitch, and the blind hemmer machine.	0	1	2	3	4	
113. Make minor adjustments on the industrial machines such as replacing needles correctly, oiling, and adjusting the tension.	0	1	2	3	4	
UPHOLSTERY						
Construct slip covers.	0	1	2	3	4	
114. Select fabric appropriate for slip covers.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
115. Take accurate measurements.	0	1	2	3	4	
116. Cut fabric into rectangular pieces according to measurements.	0	1	2	3	4	
117. Pin rectangular pieces in place on furniture.	0	1	2	3	4	
118. Mark pleats, tuck-ins, and seam lines with chalk.	0	1	2	3	4	
119. Install zippers.	0	1	2	3	4	
120. Attach skirt and dust covers.	0	1	2	3	4	
121. Define terms related to upholstery.	0	1	2	3	4	
122. Use upholstering tools.	0	1	2	3	4	
123. Estimate fabric yardage for upholstering furniture.	0	1	2	3	4	
124. Select appropriate upholstery fabric.	0	1	2	3	4	
125. Select trim that coordinates with the color, pattern, and texture of cover fabric.	0	1	2	3	4	
126. Measure furniture accurately to determine cover pattern.	0	1	2	3	4	
127. Cut and mark upholstery cover fabric.	0	1	2	3	4	
128. Prepare and sew welts.	0	1	2	3	4	
129. Install the covers.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
FURNITURE						
Evaluate furniture according to style, period, and quality.	0	1	2	3	4	
130. Examine the basic styles of furniture.	0	1	2	3	4	
131. Outline characteristics of the basic styles of furniture periods.	0	1	2	3	4	
132. Analyze characteristics and descriptions of furniture periods.	0	1	2	3	4	
133. Point out common variations of furniture styles.	0	1	2	3	4	
Complete furniture repairs and restyling.	0	1	2	3	4	
134. Identify different types of furniture joints.	0	1	2	3	4	
135. Use appropriate tools of repairing wood furniture.	0	1	2	3	4	
136. Repair broken furniture legs, backs, and arms.	0	1	2	3	4	
137. Restyle furniture pieces.	0	1	2	3	4	
Refinish wood furniture.	0	1	2	3	4	
138. Recognize/identify different kinds of woods.	0	1	2	3	4	
139. Use appropriate tools for furniture refinishing.	0	1	2	3	4	
140. Remove spots, rings, scratches, and gouges from wood.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
141. Remove old wood finish using appropriate techniques.	0	1	2	3	4	
142. Use stains, fillers, varnish, and lacquer in finishing furniture.	0	1	2	3	4	
AUTOMOTIVE UPHOLSTERY AND TRIM						
Upholster auto seats.	0	1	2	3	4	
143. Select appropriate and compatible fabric for automobile interior.	0	1	2	3	4	
144. Take accurate measurements for auto upholstery and estimate required yardage.	0	1	2	3	4	
145. Use appropriate tools for auto upholstery.	0	1	2	3	4	
146. Make pattern for auto upholstery.	0	1	2	3	4	
147. Cut and mark auto upholstery fabric.	0	1	2	3	4	
148. Make necessary repairs in seat padding.	0	1	2	3	4	
149. Prepare and sew on welting.	0	1	2	3	4	
150. Fit and attach fabric pieces to auto seats.	0	1	2	3	4	
Customize automobiles.	0	1	2	3	4	
151. Select carpet appropriate for floor and interior of automobile.	0	1	2	3	4	
152. Take accurate measurements of automobile top, floor, interior, and window.	0	1	2	3	4	
153. Make pattern for vinyl tops, floor carpet, and carpet for interiors for automobiles.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
154. Cut vinyl and carpet fabric for automobiles.	0	1	2	3	4	
155. Use appropriate tools for installing carpet, replacing window glass, applying vinyl, and attaching mechanisms such as door latches and locks in automobiles.	0	1	2	3	4	
DRAPERY MAKING						
Utilize appropriate techniques for construction of different styles of draperies, curtains, and headings.	0	1	2	3	4	
156. Take accurate window measurements for the fit of draperies.	0	1	2	3	4	
157. Use appropriate small equipment for drapery and curtain construction.	0	1	2	3	4	
158. Complete a work order for curtains, draperies, and headings.	0	1	2	3	4	
159. Figure amount of fabric yardage needed for different types of draperies.	0	1	2	3	4	
160. Perform tabling tasks in drapery construction.	0	1	2	3	4	
161. Hem draperies and curtains.	0	1	2	3	4	
162. Plan pleats and spaces for drapes.	0	1	2	3	4	
163. Fold, pin, and stitch pleats.	0	1	2	3	4	
164. Use correct procedures for breaking and tacking pleats.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
165. Cite the purpose of accurate folding and banding of draperies and curtains.	0	1	2	3	4	
166. Identify mounting methods used in the installation of draperies and curtains.	0	1	2	3	4	
167. Identify the types of window headings available for accessorizing draperies.	0	1	2	3	4	
168. Describe the steps in the construction of window headings.	0	1	2	3	4	
TEXTILES						
Assess basic textiles with focus on fibers, yarns, fabrics, and finishing processes.	0	1	2	3	4	
169. Determine properties that affect the hand, appearance, and performance of textiles.	0	1	2	3	4	
170. Outline the steps in the manufacturing, marketing, and distribution of textile products.	0	1	2	3	4	
171. Analyze natural and man-made fibers, yarn and fabric construction methods, and finishing processes.	0	1	2	3	4	
172. Examine historical and contemporary textile developments.	0	1	2	3	4	
173. Examine current developments in textiles.	0	1	2	3	4	
Compare textile characteristics to end use performance.	0	1	2	3	4	
174. Relate textile characteristics to end use performance.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
175. Predict end use performance of textiles used in interiors.	0	1	2	3	4	
176. Analyze suitable textiles for use in apparel and in interiors.	0	1	2	3	4	
177. Plan a garment or interior using exotic quality fabrics.	0	1	2	3	4	
Point out textile characteristics and care requirements of various fabrics.	0	1	2	3	4	
APPAREL CONSTRUCTION						
Construct a complete garment.	0	1	2	3	4	
178. Take accurate body measurements.	0	1	2	3	4	
179. Determine figure type.	0	1	2	3	4	
180. Ascertain correct pattern size.	0	1	2	3	4	
Select colors, textures, lines, design, and fabric most flattering for the individual.	0	1	2	3	4	
181. Analyze individual fitting problems to determine needed pattern alterations.	0	1	2	3	4	
182. Make pattern alterations for different figure problems.	0	1	2	3	4	
183. Make necessary garment alterations for a perfect fit during the construction process.	0	1	2	3	4	
184. Exhibit accuracy in pinning, cutting, and marking garment pieces.	0	1	2	3	4	
185. Use unit construction when assembling garment pieces.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
186. Apply interfacing, underlining, and lining where appropriate.	0	1	2	3	4	
187. Manipulate with skill the following construction techniques: a. dart treatments b. pockets (inseam and patch) c. collars - (stand up and convertible) d. waistline and/or waistband e. sleeves f. buttonholes (machine) g. zippers and fasteners h. belts i. hems j. pressing k. appropriate hand stitches	0	1	2	3	4	
188. Evaluate the appearance and fit of the completed garment through observation of grain perfection, compatible inner fabric, proper construction techniques, and correct pressing techniques.	0	1	2	3	4	
189. Select appropriate fabric for custom tailored and simplified (quick) tailored garments.	0	1	2	3	4	
190. Use tailoring terminology.	0	1	2	3	4	
191. Fit and alter commercial suit pattern.	0	1	2	3	4	
192. Select appropriate findings such as interfacing, underlining, lining, buttons, thread, and tape for tailoring techniques and type of garment.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
193. Select construction techniques in terms of fiber content and characteristics of fabric for custom tailored and/or simplified tailored garment.	0	1	2	3	4	
194. Manipulate with skill the following tailoring techniques for menswear and ladies wear: a. application of fusible interfacing b. application of woven interfacing c. underlining d. cloth-lipped buttonholes e. taping and padstitching and other hand stitches f. undercollar, upper collar, and lapels g. sleeve, sleeve head, and shoulder shapes h. pockets (welt, double welt, flaps, and besom) i. hems, lining, and Hong Kong finish j. buttons and button placement	0	1	2	3	4	
Evaluate the fit and appearance of custom tailored and simplified tailored garments.	0	1	2	3	4	
APPAREL/PATTERN DESIGN						
Analyze consumer behavior patterns and demographic characteristics in regard to fashion.	0	1	2	3	4	
Distinguish fashion in the various stages of the fashion cycle from innovation to obsolescence.	0	1	2	3	4	
Outline the progression of fashions from fiber to consumer.	0	1	2	3	4	
Evaluate the work of current American and international fashion designers.	0	1	2	3	4	
Analyze designer's role in production.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
195. Create designs for a fashion line.	0	1	2	3	4	
196. Develop a fashion line.	0	1	2	3	4	
197. Organize a fashion line.	0	1	2	3	4	
198. Fabricate a fashion line.	0	1	2	3	4	
199. Categorize trim and notions by appropriate end use.	0	1	2	3	4	
200. Use a variety of sources for design inspiration.	0	1	2	3	4	
201. Draw a working sketch of fashion design.	0	1	2	3	4	
Develop and produce a line.	0	1	2	3	4	
202. Use fashion and production terminology.	0	1	2	3	4	
203. Apply principles and elements of design.	0	1	2	3	4	
204. Sketch designs using various media (pencil, charcoal, pen and ink, wash, water color, and brush).	0	1	2	3	4	
205. Execute designs through the fashion illustration technique.	0	1	2	3	4	
206. Execute designs through flat pattern techniques.	0	1	2	3	4	
207. Execute designs through draping techniques.	0	1	2	3	4	
208. Execute designs through drafting techniques.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
ALTERATIONS						
Fit, alter, and repair garments.	0	1	2	3	4	
209. Use alterations terminology.	0	1	2	3	4	
210. Fit garment on individual while maintaining grain.	0	1	2	3	4	
211. Make alteration markings on garment with chalk or pins.	0	1	2	3	4	
212. Record alteration markings on alteration ticket.	0	1	2	3	4	
213. Interpret alteration markings and make alterations on garments.	0	1	2	3	4	
214. Select and use appropriate alteration techniques for the following: a. lengthen or shorten a garment b. increase or decrease garment width c. adjust darts d. alter waistline and hipline e. alter crotch and trouser leg.	0	1	2	3	4	
HISTORY OF COSTUME						
Assess silhouettes of various time periods and cultures, and recognize modern adaptations of these silhouettes.	0	1	2	3	4	
215. Research museum and library sources for fashion identification.	0	1	2	3	4	
216. Examine fashion designs and motifs from ancient civilization to 18th century.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
217. Examine fashion designs and motifs from 18th century to the present.	0	1	2	3	4	
218. Determine customs which affect styles.	0	1	2	3	4	
219. Analyze the sociological, technological, economic, environmental, and psychological influences on fashion.	0	1	2	3	4	
Evaluate current trends in apparel industry.	0	1	2	3	4	
Evaluate designs by both American and international fashion designers.	0	1	2	3	4	
Examine the influence of art on fashion.	0	1	2	3	4	
MASS PRODUCTION						
Analyze the role of mass production in the fashion industry.	0	1	2	3	4	
220. Describe steps in the process of mass production.	0	1	2	3	4	
221. Differentiate between apparel construction processes used in large and small companies.	0	1	2	3	4	
222. List market weeks in the Apparel Mart and market places in the world.	0	1	2	3	4	
223. Use fashion industry terminology.	0	1	2	3	4	
224. Describe designer's role in the apparel industry.	0	1	2	3	4	
225. Describe related jobs in the apparel industry.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
Prepare a fashion design for mass production.	0	1	2	3	4	
226. Make master or stock pattern from designer's sketch.	0	1	2	3	4	
227. Grade patterns using a pattern grader or computer grader.	0	1	2	3	4	
228. Construct sample garments.	0	1	2	3	4	
229. Compute production costs based on fabric yardage, findings, and trim.	0	1	2	3	4	
230. Prepare production chart that includes all garment pieces, a sketch, a swatch of fabric, and all trimmings specifications.	0	1	2	3	4	
231. Construct cutting markers.	0	1	2	3	4	
232. Interpret cutting ticket.	0	1	2	3	4	
233. Prepare fabric and cut garment by hand or machine.	0	1	2	3	4	
234. Mark and shade cut garment pieces.	0	1	2	3	4	
235. Sort and bundle garment parts for delivery to assembly area.	0	1	2	3	4	
Utilize assembly line production techniques.	0	1	2	3	4	
236. Use industrial sewing terminology.	0	1	2	3	4	
237. Observe safety regulations.	0	1	2	3	4	
238. Operate industrial equipment with speed and efficiency.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
239. Follow standardized methods for operations in assembly line production.	0	1	2	3	4	
240. Figure earnings for sewing machine operators.	0	1	2	3	4	
241. Distribute and collect bundles of garment parts and supplies.	0	1	2	3	4	
242. Perform assigned sewing operations with speed and accuracy.	0	1	2	3	4	
Maintain quality control.	0	1	2	3	4	
243. Inspect garments and locate construction defects.	0	1	2	3	4	
244. Mark garments using standard defect symbols.	0	1	2	3	4	
245. Repair defective garments.	0	1	2	3	4	
246. Sort and pack finished garments.	0	1	2	3	4	
COMPUTER APPLICATIONS						
Evaluate computer applications for clothing/textiles technology.	0	1	2	3	4	
247. Use computer systems for business finance and sales.	0	1	2	3	4	
248. Use computer systems for telecommunications.	0	1	2	3	4	
249. Use computer systems for merchandising and marketing.	0	1	2	3	4	
250. Use computer systems for production planning.	0	1	2	3	4	

COMPETENCIES AND SUBCOMPETENCIES		NI	SI	MI	I	VI	COMMENTS
251.	Use computer systems for materials handling.	0	1	2	3	4	
252.	Use art/graphics computer systems for apparel design.	0	1	2	3	4	
253.	Use art/graphics computer systems for textile design.	0	1	2	3	4	
254.	Use robotics in apparel and textile manufacturing.	0	1	2	3	4	
255.	Use computer systems for pattern making.	0	1	2	3	4	
256.	Use computer systems for grading and marker making.	0	1	2	3	4	
257.	Use computer systems for cutting.	0	1	2	3	4	
258.	Use computer systems for production control (sewing).	0	1	2	3	4	
259.	Use computer systems for distribution.	0	1	2	3	4	

Appendix D

Round II Instrument and Correspondence

PLEASE MAIL BY
APRIL 8, 1985

HOME ECONOMICS CURRICULUM CENTER
Texas Tech University
P.O. Box 4067
Lubbock, Texas 79409-4067
(806) 742-3028

March 27, 1985

Dear

We are most grateful to you for returning the first questionnaire on the identification of competencies taught in post secondary clothing/textiles technology programs. As you will recall, our purpose is to achieve consensus among selected post-secondary instructors regarding the importance of the competencies identified.

Enclosed you will find the second competency questionnaire. Subcompetencies on which agreement was reached in the first questionnaire have been eliminated. Competencies on which agreement was reached are indicated so you need not respond to them again. The average or mean rating for each of the remaining competencies and subcompetencies is indicated by an asterisk (*).

Please complete the second questionnaire following the directions given. Be sure to rate each competency and subcompetency on which agreement was not reached in the first round. If your rating is significantly above or below the mean or average rating from the first questionnaire, you may want to comment on your rating. This information will help us identify more clearly the competencies and subcompetencies needed for clothing/textiles technology programs in Texas.

Please return the questionnaire in the enclosed postage paid envelope by April 8. If a third questionnaire is necessary, it will be mailed as soon as possible thereafter. Thank you again for your commitment and continued support.

Sincerely,

Linda R. Glosson
Project Director

Patricia Horridge
Project Co-Director

Myra B. Timmons
Project Co-Director

Enclosure

NAME _____ INSTITUTION _____ CITY _____

POST-SECONDARY CLOTHING/TEXTILES TECHNOLOGY COMPETENCY IDENTIFICATION - QUESTIONNAIRE II

Listed below are competencies which post-secondary clothing/textiles technology programs may develop in the courses offered.

DIRECTIONS:

1. Please read each of the competencies listed below.
   Note: The average or mean rating given to each in Questionnaire I is shown by an asterisk (*).
2. Judge how important you feel it would be to develop each competency in a post-secondary clothing/textiles technology program, using the rating scale below. **Be sure to respond to each competency listed.**
3. If you have any comments regarding individual competencies, please make them in the space provided to the right of each.

RATING SCALE:

0 = Not Important (NI)
1 = Slightly Important (SI)
2 = Moderately Important (MI)
3 = Important (I)
4 = Very Important (VI)

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
PROFESSIONAL PRACTICES						
Assess own professionalism.	**Agreement Reached**					
Evaluate career opportunities.	**Agreement Reached**					
Prepare a professional portfolio.	**Agreement Reached**					
4. Sketch, photograph, or construct samples in order to communicate ideas.	0	1	2 *	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
Perform appropriate work skills.	**Agreement Reached**					
	MERCHANDISING					
Develop personal selling techniques.	**Agreement Reached**					
Evaluate techniques in selling fashion apparel and accessories in retail and wholesale markets.	**Agreement Reached**					
Evaluate the fashion industry with regard to its scope and economic importance.	**Agreement Reached**					
13. Demonstrate a working knowledge of production in the fashion industry.	0	1	2*	3	4	
14. Select retail fashion distribution techniques appropriate for the interests and lifestyles of firm's target customer.	0	1	2*	3	4	
15. Determine the consumption of goods within the fashion industry.	0	1	2*	3	4	
16. Utilize demographic and psychographic data on the consumer to develop fashion products and services.	0	1	2*	3	4	
18. Determine the potential demand among a store's customers for fashion merchandise.	0	1	2*	3	4	
19. Analyze customer acceptance of merchandise.	0	1	2*	3	4	
20. Analyze merchandise in light of customer buying motives.	0	1	2*	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
MERCHANDISE PLANNING AND CONTROL						
Evaluate merchandise planning and control: sales and inventories.	0	1	2*	3	4	
21. Analyze merchandise by department and classification.	0	1	2*	3	4	
23. Plan stock in terms of dollars.	0	1	2 *	3	4	
Evaluate planning and control of merchandise.	0	1	2 *	3	4	
25. Analyze unit control methods.	0	1	2*	3	4	
26. Plan and control staple stocks.	0	1	2*	3	4	
27. Plan and control fashion stocks.	0	1	2 *	3	4	
Assess the principles and procedures for profitable manipulation of merchandise.	Agreement Reached					
29. Project profit above expenses.	0	1	2 *	3	4	
Price merchandise.	Agreement Reached					
30. Determine elements in merchandise markup.	0	1	2 *	3	4	
31. Examine the pricing of individual items.	0	1	2 *	3	4	
32. Analyze competitive pricing policies.	0	1	2 *	3	4	
33. Plan appropriate price lines.	0	1	2 *	3	4	
34. Use markdowns to improve the sale of a product.	0	1	2 *	3	4	
Conduct unit control and/or physical inventory.	0	1	2 *	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
Plan inventory valuation of merchandise: cost method or retail method.	Agreement Reached					
36. Locate buying information.	0	1	2 *	3	4	
38. Buy fashion and staple merchandise and accessories.	0	1	2 *	3	4	
FASHION COMMUNICATION						
Evaluate fashion promotion.	Agreement Reached					
40. Plan sales promotion activities to supplement and complement personal selling.	0	1	2 *	3	4	
41. Predict fashion trends.	0	1	2 *	3	4	
Plan advertising to promote fashions.	0	1	2*	3	4	
42. Name types of advertising available for promoting fashions.	0	1	2*	3	4	
43. Describe characteristics of an effective advertisement.	0	1	2*	3	4	
44. Select media for fashion advertising.	0	1	2*	3	4	
45. Develop a fashion advertising campaign.	0	1	2 *	3	4	
Develop an effective merchandising display.	Agreement Reached					
46. Identify types of display including: interior display, exterior display, window display, and seasonal or special display.	0	1	2 *	3	4	
47. Develop window and interior displays.	0	1	2 *	3	4	
48. Solve technical and mechanical problems in display.	0	1	*2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
49. Utilize appropriate materials and techniques.	0	1	2*	3	4	
Plan, produce, and organize a fashion show.	0	1	2*	3	4	
50. Select and coordinate merchandise for a fashion show.	0	1	2*	3	4	
51. Write a script for a fashion show.	0	1	*2	3	4	
52. Plan set design, choreography, publicity, and staging.	0	1	*2	3	4	
53. Manage a fashion show.	0	1	*2	3	4	
54. Present commentary.	0	1	*2	3	4	
MARKETERS OF FASHION/TEXTILES						
Identify the various industries involved in marketing fashion goods.	0	1	2*	3	4	
55. Name manufacturers of textile fibers, fabrics, leather, and fur.	0	1	*2	3	4	
56. List manufacturers of women's apparel, menswear, and fashion accessories.	0	1	*2	3	4	
57. Name foreign fashion market centers.	0	1	*2	3	4	
Evaluate the services of auxiliary enterprises (advisors, sources of information, and promoters of fashion news) in the fashion industry.	0	1	*2	3	4	
PRODUCT QUALITY						
Evaluate the impact of materials and construction on the quality and value of products.	Agreement Reached					

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
58. Point out quality standards of home furnishings.	0	1	*2	3	4	
59. Point out quality standards of accessory items.	0	1	*2	3	4	
60. Point out quality standards of apparel items.	0	1	*2	3	4	
61. Point out quality standards of non-textile products.	0	1	*2	3	4	
SPACE PLANNING						
Evaluate all aspects of interior space and its relationship to exterior space.	0	1	*2	3	4	
62. Analyze the two basic types of design: structural and decorative.	0	1	*2	3	4	
Evaluate the two basic approaches to space design: the closed plan and the open plan.	0	1	*2	3	4	
64. Apply basic interior design principles to furniture layouts and space distribution.	0	1	*2	3	4	
65. Plan an environment with well-defined areas of activity and good traffic lanes.	0	1	2*	3	4	
Devise furniture arrangements which meet the standards of comfort and convenience, as well as attractive composition.	0	1	*2	3	4	
Design residential interiors using appropriate materials, methods, and professional procedures.	0	1	*2	3	4	
66. Plan residential interiors with emphasis on space planning, furniture, color, and lighting.	0	1	*2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
67. Plan residential interiors using both traditional and contemporary interiors.	0	1	* 2	3	4	
Design commercial interiors with emphasis on space, function, lighting materials, aesthetics, and legal consideration.	0	1	* 2	3	4	
68. Examine the latest trends and materials used in commercial interiors.	0	1	* 2	3	4	
69. Plan a barrier-free interior for a commercial space.	0	1	* 2	3	4	
INTERIOR COMPONENTS						
Judge the nature of colors and how they combine with each other.	0	1	2 *	3	4	
70. Relate the impact of color to mood, temperament, and behaviors.	0	1	* 2	3	4	
73. Outline basic color schemes: related and contrasting.	0	1	2*	3	4	
74. Determine the effects of surroundings on color.	0	1	* 2	3	4	
75. Apply color theory.	0	1	2*	3	4	
Assess the techniques used in creating fabrics and hangings.	0	1	* 2	3	4	
Combine fabrics that complement the mood and style created in a room.	0	1	* 2	3	4	
76. Utilize fabrics appropriate to life-styles and activities.	0	1	* 2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
77. Estimate textile yardage for upholstery, window treatments, floor coverings, and wall coverings.	0	1	*2	3	4	
Evaluate the value and function of windows and their appropriate treatment.	0	1	*2	3	4	
78. Select window treatments that are functional and appropriate in style.	0	1	*2	3	4	
79. Sketch the window treatment, show fabric or other material samples, and select picture of the appropriate furnishing.	0	1	*2	3	4	
Select appropriate lighting for interior design.	0	1	*2	3	4	
80. Utilize aspects of lighting (function, aesthetics, and health).	0	1	*2	3	4	
81. Determine methods of lighting throughout an interior space: architectural and nonarchitectural.	0	1	*2	3	4	
82. Use natural daylight and artificial illumination in lighting plans.	0	1	*2	3	4	
83. Plan lighting for commercial and residential interiors.	0	1	*2	3	4	
Select appropriate floor coverings according to warmth, comfort, and beauty.	0	1	*2	3	4	
84. Distinguish between the two categories of floor coverings: soft and hard.	0	1	*2	3	4	
85. Select and use hard floor coverings: wood, masonry, vinyl, asphalt, rubber, cork, and mosaic tiles.	0	1	*2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
86. Analyze rug and carpet fibers and construction.	0	1	* 2	3	4	
87. Select and use soft floor coverings: rugs and carpets.	0	1	* 2	3	4	
Select appropriate wall treatments.	0	1	* 2	3	4	
88. Point out the advantages and disadvantages of various wall treatments.	0	1	* 2	3	4	
89. Plan wall coverings for commercial and residential interiors.	0	1	* 2	3	4	
Evaluate materials used in interior construction for their particular attributes.	0	1	* 2	3	4	
Select accessories that reflect interests and tastes of the client.	0	1	*2	3	4	
90. Select functional accessories.	0	1	* 2	3	4	
91. Select accessories for walls, tables and counter tops, floor corners, and fireplace mantles.	0	1	* 2	3	4	
92. Select decorative accessories to emphasize an area of the home or commercial work space.	0	1	* 2	3	4	
93. Plan an accessory grouping using the design principles of scale, proportion, balance, rhythm, emphasis, variety, and unity.	0	1	*2	3	4	
DRAWING TECHNIQUES						
Make renderings including: pencil, pen and ink, watercolor, pastels, color overlays, screentops, or airbrush.	0	1	* 2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
94. Use quick sketch methods in design presentation.	0	1	* 2	3	4	
95. Draft designs using professional drafting techniques.	0	1	* 2	3	4	
96. Use appropriate techniques for dimensioning and line weights.	0	1	* 2	3	4	
DESIGN COMMUNICATIONS						
Utilize architectural drawings.	0	1	* 2	3	4	
97. Use architectural terminology.	0	1	* 2	3	4	
99. Use vocabulary applied to interior environmental systems: plumbing, heating, ventilating, electrical wiring, acoustics, and alternate energy sources.	0	1	* 2	3	4	
HISTORY OF INTERIORS						
Analyze the history and profession of interior design.	0	1	* 2	3	4	
101. Examine architecture and decorative arts from post-Renaissance to the Industrial Revolution.	0	1	* 2	3	4	
102. Examine architecture and decorative arts from the Industrial Revolution to the present.	0	1	* 2	3	4	
103. Analyze the influence of social and economic conditions on styles of furniture, accessories and fabrics, and background treatments.	0	1	* 2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
104. Determine architectural styles and their development in France, England, and America.	0	1 *	2	3	4	
105. Evaluate art movements and their influence on interior designs.	0	1 *	2	3	4	
Appraise contributions of interior designers, architects, and furniture designers.	0	1 *	2	3	4	
Evaluate contemporary furniture and design movements.	0	1 *	2	3	4	
106. Present furniture that evolved from each contemporary design movement.	0	1 *	2	3	4	
107. Evidence knowledge of contemporary interior planning, design materials, and accessories.	0	1 *	2	3	4	
108. Determine effect of contemporary interiors on modern design in home environments today.	0	1 *	2	3	4	
Plan interior design utilizing traditional styles, contemporary styles, and historical restoration.	0	1 *	2	3	4	
SEWING EQUIPMENT AND MACHINES						
Select, use, and maintain sewing and pressing equipment.	0	1	*2	3	4	
109. Select and purchase sewing supplies, notions, and sewing and pressing equipment.	0	1	* 2	3	4	
110. Use appropriate pressing equipment such as point presser, needle board, press mit, press ham, tailor's iron, and clapper.	0	1	*2	3	4	
111. Thread, adjust, operate, and maintain different brands of domestic sewing machine.	0	1	*2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
112. Thread, adjust, and safely operate the overlock, lockstitch, and the blind hemmer machine.	0	1	*2	3	4	
113. Make minor adjustments on the industrial machines such as replacing needles correctly, oiling, and adjusting the tension.	0	1	*2	3	4	
UPHOLSTERY						
Construct slip covers.	0	1	* 2	3	4	
114. Select fabric appropriate for slip covers.	0	1	* 2	3	4	
115. Take accurate measurements.	0	1	*2	3	4	
116. Cut fabric into rectangular pieces according to measurements.	0	1	* 2	3	4	
117. Pin rectangular pieces in place on furniture.	0	1	* 2	3	4	
118. Mark pleats, tuck-ins, and seam lines with chalk.	0	1	*2	3	4	
119. Install zippers.	0	1	* 2	3	4	
120. Attach skirt and dust covers.	0	1	* 2	3	4	
121. Define terms related to upholstery.	0	1	* 2	3	4	
122. Use upholstering tools.	0	1	*2	3	4	
123. Estimate fabric yardage for upholstering furniture.	0	1	*2	3	4	
124. Select appropriate upholstery fabric.	0	1	*2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
125. Select trim that coordinates with the color, pattern, and texture of cover fabric.	0	1	*2	3	4	
126. Measure furniture accurately to determine cover pattern.	0	1	*2	3	4	
127. Cut and mark upholstery cover fabric.	0	1	*2	3	4	
128. Prepare and sew welts.	0	1	*2	3	4	
129. Install the covers.	0	1	*2	3	4	
FURNITURE						
Evaluate furniture according to style, period, and quality.	0	1	2*	3	4	
130. Examine the basic styles of furniture.	0	1	*2	3	4	
131. Outline characteristics of the basic styles of furniture periods.	0	1	*2	3	4	
132. Analyze characteristics and descriptions of furniture periods.	0	1	*2	3	4	
133. Point out common variations of furniture styles.	0	1	*2	3	4	
Complete furniture repairs and restyling.	0	1	*2	3	4	
134. Identify different types of furniture joints.	0	1	*2	3	4	
135. Use appropriate tools of repairing wood furniture.	0	1	*2	3	4	
136. Repair broken furniture legs, backs, and arms.	0	1	*2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
137. Restyle furniture pieces.	0	1	* 2	3	4	
Refinish wood furniture.	0	1	*2	3	4	
138. Recognize/identify different kinds of woods.	0	1	*2	3	4	
139. Use appropriate tools for furniture refinishing.	0	1	*2	3	4	
140. Remove spots, rings, scratches, and gouges from wood.	0	1	*2	3	4	
141. Remove old wood finish using appropriate techniques.	0	1	*2	3	4	
142. Use stains, fillers, varnish, and lacquer in finishing furniture.	0	1	* 2	3	4	
AUTOMOTIVE UPHOLSTERY AND TRIM						
Upholster auto seats.	0	1	* 2	3	4	
143. Select appropriate and compatible fabric for automobile interior.	0	1	* 2	3	4	
144. Take accurate measurements for auto upholstery and estimate required yardage.	0	1	* 2	3	4	
145. Use appropriate tools for auto upholstery.	0	1	* 2	3	4	
147. Cut and mark auto upholstery fabric.	0	1	* 2	3	4	
148. Make necessary repairs in seat padding.	0	1	* 2	3	4	
149. Prepare and sew on welting.	0	1	* 2	3	4	
150. Fit and attach fabric pieces to auto seats.	0	1	* 2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
Customize automobiles.	Agreement Reached					
	DRAPERY MAKING					
Utilize appropriate techniques for construction of different styles of draperies, curtains, and headings.	0	1	* 2	3	4	
156. Take accurate window measurements for the fit of draperies.	0	1	* 2	3	4	
157. Use appropriate small equipment for drapery and curtain construction.	0	1	* 2	3	4	
158. Complete a work order for curtains, draperies, and headings.	0	1	* 2	3	4	
159. Figure amount of fabric yardage needed for different types of draperies.	0	1	* 2	3	4	
160. Perform tabling tasks in drapery construction.	0	1	* 2	3	4	
161. Hem draperies and curtains.	0	1	* 2	3	4	
162. Plan pleats and spaces for drapes.	0	1	* 2	3	4	
163. Fold, pin, and stitch pleats.	0	1	* 2	3	4	
164. Use correct procedures for breaking and tacking pleats.	0	1	* 2	3	4	
165. Cite the purpose of accurate folding and banding of draperies and curtains.	0	1	* 2	3	4	
166. Identify mounting methods used in the installation of draperies and curtains.	0	1	* 2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
167. Identify the types of window headings available for accessorizing draperies.	0	1 *	2	3	4	
168. Describe the steps in the construction of window headings.	0	1 *	2	3	4	
TEXTILES						
Assess basic textiles with focus on fibers, yarns, fabrics, and finishing processes.	**Agreement Reached**					
170. Outline the steps in the manufacturing, marketing, and distribution of textile products.	0	1	2 *	3	4	
172. Examine historical and contemporary textile developments.	0	1	2 *	3	4	
Compare textile characteristics to end use performance.	**Agreement Reached**					
175. Predict end use performance of textiles used in interiors.	0	1	2 *	3	4	
177. Plan a garment or interior using exotic quality fabrics.	0	1 *	2	3	4	
Point out textile characteristics and care requirements of various fabrics.	**Agreement Reached**					
APPAREL CONSTRUCTION						
Construct a complete garment.	0	1	2 *	3	4	
178. Take accurate body measurements.	0	1	2 *	3	4	
179. Determine figure type.	0	1	2 *	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
180. Ascertain correct pattern size.	0	1	2*	3	4	
Select colors, textures, lines, design, and fabric most flattering for the individual.	0	1	2 *	3	4	
181. Analyze individual fitting problems to determine needed pattern alterations.	0	1	2*	3	4	
182. Make pattern alterations for different figure problems.	0	1	2*	3	4	
183. Make necessary garment alterations for a perfect fit during the construction process.	0	1	2*	3	4	
184. Exhibit accuracy in pinning, cutting, and marking garment pieces.	0	1	2*	3	4	
185. Use unit construction when assembling garment pieces.	0	1	2*	3	4	
186. Apply interfacing, underlining, and lining where appropriate.	0	1	2*	3	4	
187. Manipulate with skill the following construction techniques: a. dart treatments b. pockets (inseam and patch) c. collars - (stand up and convertible) d. waistline and/or waistband e. sleeves f. buttonholes (machine) g. zippers and fasteners h. belts i. hems j. pressing k. appropriate hand stitches	0	1	2*	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
188. Evaluate the appearance and fit of the completed garment through observation of grain perfection, compatible inner fabric, proper construction techniques, and correct pressing techniques.	0	1	2*	3	4	
189. Select appropriate fabric for custom tailored and simplified (quick) tailored garments.	0	1	2*	3	4	
190. Use tailoring terminology.	0	1	*2	3	4	
191. Fit and alter commercial suit pattern.	0	1	*2	3	4	
192. Select appropriate findings such as interfacing, underlining, lining, buttons, thread, and tape for tailoring techniques and type of garment.	0	1	*2	3	4	
193. Select construction techniques in terms of fiber content and characteristics of fabric for custom tailored and/or simplified tailored garment.	0	1	*2	3	4	
194. Manipulate with skill the following tailoring techniques for menswear and ladies wear: a. application of fusible interfacing b. application of woven interfacing c. underlining d. cloth-lipped buttonholes e. taping and padstitching and other hand stitches f. undercollar, upper collar, and lapels g. sleeve, sleeve head, and shoulder shapes h. pockets (welt, double welt, flaps, and besom) i. hems, lining, and Hong Kong finish j. buttons and button placement	0	1	*2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
Evaluate the fit and appearance of custom tailored and simplified tailored garments.	0	1	*2	3	4	
APPAREL/PATTERN DESIGN						
Analyze consumer behavior patterns and demographic characteristics in regard to fashion.	0	1	*2	3	4	
Distinguish fashion in the various stages of the fashion cycle from innovation to obsolescence.	0	1	*2	3	4	
Outline the progression of fashions from fiber to consumer.	0	1	*2	3	4	
Evaluate the work of current American and international fashion designers.	0	1	*2	3	4	
Analyze designer's role in production.	0	1	*2	3	4	
195. Create designs for a fashion line.	0	1	*2	3	4	
196. Develop a fashion line.	0	1	*2	3	4	
197. Organize a fashion line.	0	1	*2	3	4	
198. Fabricate a fashion line.	0	1	*2	3	4	
199. Categorize trim and notions by appropriate end use.	0	1	*2	3	4	
200. Use a variety of sources for design inspiration.	0	1	*2	3	4	
201. Draw a working sketch of fashion design.	0	1	*2	3	4	
Develop and produce a line.	0	1	*2	3	4	
202. Use fashion and production terminology.	0	1	*2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
203. Apply principles and elements of design.	0	1	*2	3	4	
204. Sketch designs using various media (pencil, charcoal, pen and ink, wash, water color, and brush).	0	1	* 2	3	4	
205. Execute designs through the fashion illustration technique.	0	1	* 2	3	4	
206. Execute designs through flat pattern techniques.	0	1	* 2	3	4	
207. Execute designs through draping techniques.	0	1	* 2	3	4	
208. Execute designs through drafting techniques.	0	1	* 2	3	4	
ALTERATIONS						
Fit, alter, and repair garments.	0	1	*2	3	4	
209. Use alterations terminology.	0	1	*2	3	4	
210. Fit garment on individual while maintaining grain.	0	1	*2	3	4	
211. Make alteration markings on garment with chalk or pins.	0	1	*2	3	4	
212. Record alteration markings on alteration ticket.	0	1	* 2	3	4	
213. Interpret alteration markings and make alterations on garments.	0	1	*2	3	4	
214. Select and use appropriate alteration techniques for the following: a. lengthen or shorten a garment b. increase or decrease garment width c. adjust darts d. alter waistline and hipline e. alter crotch and trouser leg.	0	1	*2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
			HISTORY OF COSTUME			
Assess silhouettes of various time periods and cultures, and recognize modern adaptations of these silhouettes.	0	1	*2	3	4	
215. Research museum and library sources for fashion identification.	0	1	*2	3	4	
216. Examine fashion designs and motifs from ancient civilization to 18th century.	0	1	*2	3	4	
217. Examine fashion designs and motifs from 18th century to the present.	0	1	*2	3	4	
218. Determine customs which affect styles.	0	1	*2	3	4	
219. Analyze the sociological, technological, economic, environmental, and psychological influences on fashion.	0	1	*2	3	4	
Evaluate current trends in apparel industry.	0	1	2*	3	4	
Evaluate designs by both American and international fashion designers.	0	1	2*	3	4	
Examine the influence of art on fashion.	0	1	*2	3	4	
			MASS PRODUCTION			
Analyze the role of mass production in the fashion industry.	0	1	2*	3	4	
220. Describe steps in the process of mass production.	0	1	*2	3	4	
221. Differentiate between apparel construction processes used in large and small companies.	0	1	*2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
222. List market weeks in the Apparel Mart and market places in the world.	0	1	* 2	3	4	
223. Use fashion industry terminology.	0	1	2 *	3	4	
224. Describe designer's role in the apparel industry.	0	1	* 2	3	4	
225. Describe related jobs in the apparel industry.	0	1	* 2	3	4	
Prepare a fashion design for mass production.	0	1	* 2	3	4	
226. Make master or stock pattern from designer's sketch.	0	1	* 2	3	4	
227. Grade patterns using a pattern grader or computer grader.	0	1	* 2	3	4	
228. Construct sample garments.	0	1	* 2	3	4	
229. Compute production costs based on fabric yardage, findings, and trim.	0	1	* 2	3	4	
230. Prepare production chart that includes all garment pieces, a sketch, a swatch of fabric, and all trimmings specifications.	0	1	* 2	3	4	
231. Construct cutting markers.	0	1	* 2	3	4	
232. Interpret cutting ticket.	0	1	* 2	3	4	
233. Prepare fabric and cut garment by hand or machine.	0	1	* 2	3	4	
234. Mark and shade cut garment pieces.	0	1	* 2	3	4	
235. Sort and bundle garment parts for delivery to assembly area.	0	1	* 2	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
Utilize assembly line production techniques.	0	1	* 2	3	4	
236. Use industrial sewing terminology.	0	1	* 2	3	4	
237. Observe safety regulations.	0	1	* 2	3	4	
238. Operate industrial equipment with speed and efficiency.	0	1	* 2	3	4	
239. Follow standardized methods for operations in assembly line production.	0	1	* 2	3	4	
240. Figure earnings for sewing machine operators.	0	1	* 2	3	4	
241. Distribute and collect bundles of garment parts and supplies.	0	1	* 2	3	4	
242. Perform assigned sewing operations with speed and accuracy.	0	1	* 2	3	4	
Maintain quality control.	0	1	* 2	3	4	
243. Inspect garments and locate construction defects.	0	1	* 2	3	4	
244. Mark garments using standard defect symbols.	0	1	* 2	3	4	
245. Repair defective garments.	0	1	* 2	3	4	
246. Sort and pack finished garments.	0	1	* 2	3	4	
COMPUTER APPLICATIONS						
Evaluate computer applications for clothing/textiles technology.	0	1	2*	3	4	

COMPETENCIES AND SUBCOMPETENCIES	NI	SI	MI	I	VI	COMMENTS
247. Use computer systems for business finance and sales.	0	1	2*	3	4	
248. Use computer systems for telecommunications.	0	1	2*	3	4	
249. Use computer systems for merchandising and marketing.	0	1	2*	3	4	
250. Use computer systems for production planning.	0	1	*2	3	4	
251. Use computer systems for materials handling.	0	1	*2	3	4	
252. Use art/graphics computer systems for apparel design.	0	1	* 2	3	4	
253. Use art/graphics computer systems for textile design.	0	1	* 2	3	4	
254. Use robotics in apparel and textile manufacturing.	0	1	* 2	3	4	
255. Use computer systems for pattern making.	0	1	* 2	3	4	
256. Use computer systems for grading and marker making.	0	1	* 2	3	4	
257. Use computer systems for cutting.	0	1	* 2	3	4	
258. Use computer systems for production control (sewing).	0	1	* 2	3	4	
259. Use computer systems for distribution.	0	1	*2	3	4	

Appendix E

Tables 2 and 3

Table 2

General Respondent Characteristics

Variable	Number	Percent
Education		
High School Graduate	10	17
Certificate Program	3	5
Associate Degree	9	15
Bachelor's Degree	15	25
Master's Degree	22	37
Doctorate Degree	1	2
Present Age		
20-35 years	14	23
36-50 years	29	48
51-65 years	18	30
66 years or older		
Sex		
Male	17	28
Female	44	72

Variable	Total No. of Instructors*	Years				
		1-5	6-15	16-25	26-35	36-over
Post Secondary Teaching Assignments						
Fashion Merchandising	22	12	9	0	1	0
Fashion/Pattern Design	8	3	2	2	1	0
Alterations/Tailoring	6	2	2	1	0	1
Interior Decorating/Design	11	6	5	0	0	0
Upholstery	19	8	11	0	0	0
Business/Industry Employment						
Fashion Merchandising	23	14	7	2	0	0
Fashion/Pattern Design	13	4	6	1	1	1
Alterations/Tailoring	14	3	1	6	0	4
Interior Decorating/Design	11	6	2	3	0	0
Upholstery	19	5	2	6	6	0

Table 2 (continued)

Variable	Total No. of Instructors*	College				Program					
		0-4999	5-9999	10-2500	Over 25	25 Under	26-50	51-100	101-150	151-200	Over 200
Enrollment											
College	61	16	26	5	14						
Program Areas:											
Fashion Merchandising	22					3	11	7	1	0	0
Fashion/Pattern Design	9					6	0	3	0	0	0
Alterations/Tailoring	6					0	1	0	0	5	0
Interior Decorating/ Design	12					2	2	4	1	0	3
Upholstery	19					2	2	1	3	0	11

*Total number of instructors may include more than 61 due to multi-curriculum area assignments.

Table 3

Mean Ratings and Percentages of Consensus by Delphi Round

Statement Number	Round I N = 61 %	Round I N = 61 Mean	Round II N = 45 %	Round II N = 45 Mean	Significance
Professional Practices					
Assess own professionalism.	86.9	3.27			.001
1.	85.2	3.27			.001
2.	85.2	3.16			.001
3.	78.7	3.04			.001
Evaluate career opportunities.	78.7	3.01			.001
Prepare a professional portfolio.	63.9	2.50			.05
4.	59.0	2.40	53.3	2.40	NS
5.	60.7	2.42			.05
6.	60.7	2.42	64.4	2.38	.05
Perform appropriate work skills.	74.5	3.01			.001
Merchandising					
Develop personal selling techniques.	78.7	3.00			.001
7.	73.8	2.80			.001
8.	70.5	2.85			.01
9.	77.0	2.91			.001
Evaluate techniques in selling fashion apparel and accessories in retail and wholesale markets.	70.5	2.56			.001
10.	72.1	2.72			.001
11.	60.6	2.48			.05
12.	63.9	2.49			.05
Evaluate the fashion industry with regard to its scope and economic importance.	60.6	2.43			.05
13.	57.4	2.06	80.0	2.38	.001
14.	54.1	2.24	64.4	2.51	.05
15.	63.9	2.03	75.6	2.44	.05

Table 3 (continued)

Statement Number	Round I N = 61 %	Round I N = 61 Mean	Round II N = 45 %	Round II N = 45 Mean	Significance
16.	54.1	2.06	75.6	2.33	.001
17.	63.9	2.41			.05
18.	55.7	2.30	60.0	2.56	.05
19.	55.1	2.31	66.7	2.69	.05
20.	52.5	2.21	64.4	2.60	.05
Merchandise Planning and Control					
Evaluate merchandise planning and control: sales and inventories.	57.3	2.16	64.4	2.58	.05
21.	57.4	2.13	68.9	2.60	.01
22.	62.3	2.33			.05
23.	57.4	2.34	73.3	2.73	.001
24.	62.3	2.30			.05
Evaluate planning and control of merchandise.	57.4	2.26	62.2	2.42	.05
25.	49.2	2.11	68.9	2.44	.01
26.	57.4	2.16	66.7	2.54	.05
27.	54.4	2.20	66.7	2.58	.05
Assess the principles and procedures for profitable manipulation of merchandise.	62.3	2.31			.05
28.	63.9	2.38			.05
29.	57.4	2.33	73.3	2.69	.001
Price merchandise.	60.6	2.38			.05
30.	57.4	2.28	68.9	2.64	.01
31.	59.0	2.24	60.0	2.58	.05
32.	59.0	2.31	66.7	2.69	.05
33.	54.1	2.23	68.9	2.76	.01
34.	55.7	2.24	60.0	2.53	.05
Conduct unit control and/or physical inventory.	55.7	2.34	64.4	2.58	.05
Plan inventory valuation of merchandise: cost method or retail method.	60.6	2.36			.05
35.	60.6	2.26			.05

Table 3 (continued)

Statement Number	Round I N = 61 %	Round I N = 61 Mean	Round II N = 45 %	Round II N = 45 Mean	Significance
36.	57.4	2.16	64.4	2.51	.05
37.	63.9	2.31			.05
38.	59.0	2.31	60.0	2.49	.05
Fashion Communication					
Evaluate fashion promotion.	60.0	2.23			.05
39.	60.0	2.26			.05
40.	57.4	2.18	64.4	2.51	.05
41.	54.1	2.16	60.0	2.58	.05
Plan advertising to promote fashions.	54.1	2.13	57.8	2.40	NS
42.	52.4	2.06	62.2	2.47	.05
43.	54.1	2.13	66.7	2.44	.05
44.	57.4	2.10	73.3	2.49	.001
45.	54.1	2.15	66.7	2.51	.05
Develop an effective merchandising display	62.3	2.33			.05
46.	55.7	2.28	62.2	2.56	.05
47.	52.4	2.15	64.4	2.56	.05
48.	42.6	1.92	64.4	2.24	.05
49.	50.8	2.06	57.8	2.38	NS
Plan, product, and organize a fashion show.	57.5	2.05	66.7	2.38	.05
50.	59.2	2.08	64.4	2.51	.05
51.	62.3	1.93	68.9	2.27	.01
52.	41.0	2.02	68.9	2.27	.01
53.	46.0	1.87	68.9	2.24	.01
54.	45.9	2.03	60.0	2.22	.01
Marketers of Fashion/Textiles					
Identify the various industries involved in marketing fashion goods.	52.4	1.90	77.8	2.31	.001
55.	45.9	1.88	68.9	2.09	.01
56.	44.2	1.84	62.2	2.13	.05
57.	36.0	1.84	68.9	2.24	.01

Table 3 (continued)

Statement Number	Round I N = 61 %	Round I N = 61 Mean	Round II N = 45 %	Round II N = 45 Mean	Significance
Evaluate the services of auxiliary enterprises in the fashion industry.	44.3	1.95	66.7	2.16	.01
Product Quality					
Evaluate the impact of materials and construction on the quality and value of products.	60.0	2.11			.05
58.	44.3	1.80	46.7	2.31	NS
59.	47.5	1.89	60.0	2.27	.05
60.	50.8	2.01	68.9	2.53	.01
61.	49.2	1.74	71.1	2.27	.01
Space Planning					
Evaluate all aspects of interior space and its relationship to exterior space.	49.2	1.79	77.8	2.11	.001
62.	50.8	1.82	66.7	2.08	.05
63.	60.6	2.24			.05
Evaluate the two basic approaches to space design: the closed plan the open plan.	45.9	1.82	64.4	2.02	.05
64.	45.9	1.80	55.6	2.40	NS
65.	54.1	2.03	57.8	2.42	NS
Devise furniture arrangements which meet the standards of comfort and convenience, as well as attractive composition.	45.9	1.82	53.3	2.42	NS
Design residential interiors using appropriate materials, methods, and professional procedures.	49.2	1.66	55.6	2.36	NS
66.	49.2	1.69	57.8	2.27	NS
67.	49.2	1.64	60.0	2.09	.05
Design commercial interiors with emphasis on space,					

Table 3 (continued)

Statement Number	Round I N = 61 %	Round I N = 61 Mean	Round II N = 45 %	Round II N = 45 Mean	Significance
function, lighting materials, aesthetics, and legal consideration.	47.3	1.82	62.2	2.17	.05
68.	44.3	1.70	73.3	2.16	.001
69.	44.3	1.66	64.4	2.16	.05
Interior Components					
Judge the nature of colors and how they combine with each other.	57.4	2.20	71.4	2.71	.01
70.	52.4	2.00	66.7	2.60	.05
71.	60.0	2.21			.05
72.	60.6	2.18			.05
73.	57.4	2.06	73.3	2.71	.001
74.	47.5	2.00	66.7	2.69	.05
75.	55.7	2.11	65.9	2.68	.05
Assess the techniques used in creating fabrics and hangings.	45.9	1.64	63.6	2.23	.05
Combine fabrics that complement the mood and style created in a room.	47.5	1.77	72.7	2.66	.001
76.	50.8	1.90	68.2	2.66	.01
77.	42.4	1.84	54.5	2.59	NS
Evaluate the value and function of windows and their appropriate treatment.	47.4	1.79	63.6	2.25	.05
78.	55.7	1.72	70.4	2.43	.01
79.	41.0	1.69	72.1	2.21	.001
Select appropriate lighting for interior design.	54.1	1.75	64.4	2.38	.05
80.	59.0	1.62	75.6	2.33	.001
81.	44.2	1.67	73.3	2.24	.001
82.	49.2	1.57	71.1	2.27	.01
83.	47.5	1.62	68.9	2.27	.01
Select appropriate floor coverings according to warmth, comfort, and beauty.	43.2	1.75	64.4	2.38	.05
84.	45.9	1.64	64.4	2.20	.05

Table 3 (continued)

Statement Number	Round I N = 61 %	Round I N = 61 Mean	Round II N = 45 %	Round II N = 45 Mean	Significance
85.	47.5	1.57	66.7	2.04	.05
86.	45.9	1.57	64.4	2.08	.05
87.	47.9	1.62	62.2	2.02	.05
Select appropriate wall treatments.	55.7	1.75	60.0	2.20	.05
88.	44.2	1.65	68.9	2.20	.01
89.	45.9	1.62	66.7	2.16	.05
Evaluate materials used in interior construction for their particular attributes.	44.3	1.62	73.3	2.11	.001
Select accessories that reflect interests and tastes of the client.	49.2	1.85	73.3	2.36	.001
90.	45.9	1.70	71.1	2.13	.01
91.	47.5	1.65	68.9	2.00	.01
92.	44.3	1.69	71.1	2.08	.01
93.	41.6	1.74	64.4	2.22	.05
Drawing Techniques					
Make renderings including: pencil, pen and ink, water-color, pastels, color overlays, screentops, or airbrush.	44.2	1.52	66.7	1.78	.05
94.	44.2	1.72	60.0	1.91	.05
95.	47.5	1.52	55.6	1.84	NS
96.	45.9	1.52	60.0	1.80	.05
Design Communications					
Utilize architectural drawings.	57.3	1.36	55.6	1.76	NS
97.	57.3	1.34	53.3	1.67	NS
98.	60.0	1.36			.05
99.	54.1	1.47	46.7	1.62	NS
100.	60.0	1.33			.05
History of Interiors					
Analyze the history and profession of interior design.	44.1	1.34	55.6	1.62	NS

Table 3 (continued)

Statement Number	Round I N = 61 %	Round I N = 61 Mean	Round II N = 45 %	Round II N = 45 Mean	Significance
101.	54.1	1.33	55.6	1.51	NS
102.	54.1	1.40	55.6	1.47	NS
103.	52.4	1.36	57.8	1.62	NS
104.	54.1	1.31	48.9	1.47	NS
105.	54.1	1.40	51.1	1.44	NS
Appraise contributions of interior designers, architects, and furniture designers.	49.1	1.43	46.7	1.56	NS
Evaluate contemporary furniture and design movements.	42.4	1.33	60.0	1.69	.05
106.	42.4	1.40	55.6	1.51	NS
107.	50.8	1.26	57.8	1.69	NS
108.	55.6	1.60	53.3	1.67	NS
Plan interior design utilizing traditional styles, contemporary styles, and historical restoration.	47.5	1.84	60.0	1.93	.05
Sewing Equipment and Machines					
Select, use, and maintain sewing and pressing equipment.	52.3	1.78	60.0	2.36	.05
109.	45.1	1.77	64.4	2.49	.05
110.	44.2	1.82	60.0	2.20	.05
111.	45.9	1.82	60.0	2.27	.05
112.	43.9	1.85	62.2	2.53	.05
113.	49.2	1.90	62.2	2.56	.05
Upholstery					
Construct slip covers.	52.4	1.51	51.1	2.02	NS
114.	47.4	1.67	48.9	2.11	NS
115.	49.2	1.90	57.8	2.38	NS
116.	50.8	1.66	57.8	2.16	NS
117.	54.1	1.52	55.6	2.20	NS
118.	47.5	1.82	53.3	2.20	NS
119.	49.2	1.74	55.6	2.18	NS
120.	47.5	1.72	53.3	2.16	NS
121.	49.2	1.80	53.3	2.27	NS
122.	49.2	1.85	48.9	2.27	NS

Table 3 (continued)

Statement Number	Round I N = 61 %	Round I N = 61 Mean	Round II N = 45 %	Round II N = 45 Mean	Significance
123.	47.5	1.87	53.3	2.42	NS
124.	47.5	1.85	57.8	2.51	NS
125.	47.5	1.85	55.6	2.53	NS
126.	49.2	1.93	57.8	2.56	NS
127.	49.2	1.85	55.6	2.44	NS
128.	49.2	1.77	62.2	2.29	.05
129.	49.2	1.77	53.3	2.42	NS
Furniture					
Evaluate furniture according to style, period, and quality.	44.1	2.03	68.9	2.16	.01
130.	46.5	1.90	75.6	2.02	.001
131.	45.9	1.70	71.1	1.96	.01
132.	45.9	1.77	71.1	1.98	.01
133.	41.0	1.69	73.3	2.02	.001
Complete furniture repairs and restyling.	47.5	1.67	66.7	1.89	.05
134.	50.8	1.74	68.9	2.09	.01
135.	45.9	1.80	65.9	2.11	.05
136.	45.9	1.72	61.4	2.09	.05
137.	47.5	1.54	59.1	1.98	NS
Refinish wood furniture.	50.8	1.88	61.4	2.00	.05
138.	50.8	1.90	77.3	2.27	.001
139.	50.8	1.85	63.6	2.18	.05
140.	49.2	1.87	61.4	2.30	.05
141.	49.2	1.84	56.8	2.25	NS
142.	47.5	1.79	53.3	2.18	NS
Automotive Upholstery and Trim					
Upholster auto seats.	55.7	1.39	46.7	1.71	NS
143.	55.7	1.43	44.4	1.84	NS
144.	57.4	1.46	44.4	2.04	NS
145.	59.0	1.36	42.2	1.98	NS
146.	60.6	1.27			.05
147.	59.0	1.34	40.0	2.04	NS
148.	57.4	1.41	44.4	1.93	NS
149.	59.0	1.31	51.1	1.89	NS
150.	59.0	1.36	46.7	2.00	NS

Table 3 (continued)

Statement Number	Round I N = 61 %	Round I N = 61 Mean	Round II N = 45 %	Round II N = 45 Mean	Significance
Customize automobiles.	62.3	1.15			.05
151.	60.6.	1.24			.05
152.	62.3	1.26			.05
153.	62.3	1.30			.05
154.	62.3	1.26			.05
155.	60.6	1.30			.05
Drapery Making					
Utilize appropriate techniques for construction of different styles of draperies, curtains, and headings.	52.4	1.57	62.2	2.24	.05
156.	55.7	1.70	55.6	2.38	NS
157.	52.4	1.44	57.8	2.13	NS
158.	52.4	1.54	60.0	2.11	.05
159.	52.4	1.67	53.3	2.27	NS
160.	52.4	1.40	57.8	2.04	NS
161.	54.1	1.40	55.6	2.11	NS
162.	52.4	1.48	46.7	2.24	NS
163.	54.1	1.34	53.3	2.20	NS
164.	55.7	1.34	51.1	2.13	NS
165.	55.7	1.33	53.3	2.13	NS
166.	54.1	1.51	53.3	2.16	NS
167.	53.3	1.53	60.0	2.07	.05
168.	59.0	1.41	55.6	1.91	NS
Textiles					
Assess basic textiles with focus on fibers, yarns, fabrics, and finishing processes.	72.1	2.69			.001
169.	67.2	2.60			.01
170.	49.2	2.20	75.6	2.00	.001
171.	65.6	2.52			.05
172.	47.5	2.16	64.4	1.98	.05
173.	85.0	2.53			.001
Compare textile characteristics to end use performance.	66.7	2.65			.05
174.	68.3	2.68			.01
175.	51.7	2.15	60.0	1.91	.05

Table 3 (continued)

Statement Number	Round I N = 61 %	Round I N = 61 Mean	Round II N = 45 %	Round II N = 45 Mean	Significance
176.	60.0	2.30			.05
177.	53.3	1.62	55.6	1.76	NS
Point out textiles characteristics and care requirements of various fabrics.	60.6	2.39			.05
Apparel Construction					
Construct a complete garment.	44.1	2.15	48.9	2.58	NS
178.	55.7	2.18	60.0	2.73	.05
179.	57.4	2.15	57.8	2.73	NS
180.	54.1	2.10	55.6	2.64	NS
Select colors, textures, lines, design, and fabric most flattering for the individual.	57.4	2.24	64.4	2.84	.05
181.	50.8	2.01	64.4	2.58	.05
182.	47.5	2.00	66.7	2.53	.05
183.	49.2	2.03	64.4	2.53	.05
184.	50.8	2.06	68.9	2.56	.01
185.	47.5	1.95	64.4	2.40	.05
186.	50.8	2.05	64.4	2.62	.05
187.	54.1	2.10	60.2	2.67	.05
188.	55.7	2.18	60.0	2.69	.05
189.	53.3	2.01	64.4	2.40	.05
190.	43.3	1.82	62.2	2.33	.05
191.	45.0	1.75	60.0	2.33	.05
192.	41.0	1.95	62.2	2.40	.05
193.	49.2	1.82	60.0	2.47	.05
194.	44.3	1.94	60.0	2.47	.05
Evaluate the fit and appearance of custom tailored and simplified garments.	49.2	1.98	66.7	2.58	.05
Apparel/Pattern Design					
Analyze consumer behavior patterns and demographic characteristics in regard to fashion.	50.8	1.84	66.7	2.44	.05

Table 3 (continued)

Statement Number	Round I N = 61 %	Round I N = 61 Mean	Round II N = 45 %	Round II N = 45 Mean	Significance
Distinguish fashion in the various stages of the fashion cycles from innovation to obsolescence.	42.3	1.75	68.9	2.27	.01
Outline the progression of fashions from fiber to consumer.	45.9	1.64	71.1	2.29	.01
Evaluate the work of current American and international fashion designers.	44.3	1.69	68.9	2.20	.01
Analyze designer's role in production.	45.9	1.74	64.4	2.27	.05
195.	50.8	1.51	71.1	2.20	.01
196.	50.8	1.52	66.7	2.16	.05
197.	47.5	1.54	66.7	2.09	.05
198.	42.4	1.46	68.9	2.11	.01
199.	50.8	1.54	61.4	2.07	.05
200.	47.5	1.74	56.8	2.20	NS
201.	47.5	1.59	63.6	2.23	.05
Develop and produce a line.	49.1	1.51	63.6	2.02	.05
202.	45.9	1.79	63.6	2.50	.05
203.	47.5	1.84	63.6	2.48	.05
204.	50.8	1.53	63.6	2.23	.05
205.	54.1	1.50	61.3	2.23	.05
206.	52.4	1.57	65.9	2.27	.05
207.	52.4	1.48	68.2	2.23	.01
208.	54.1	1.48	65.9	2.16	.05
Alterations					
Fit, alter, and repair garments.	47.5	1.69	63.6	2.43	.05
209.	47.5	1.72	65.9	2.36	.05
210.	50.8	1.82	72.7	2.41	.01
211.	45.9	1.69	65.9	2.34	.05
212.	41.0	1.64	66.2	2.39	.05
213.	55.7	1.72	66.2	2.39	.05
214.	47.5	1.69	63.6	2.52	.05

Table 3 (continued)

Statement Number	Round I N = 61 %	Round I N = 61 Mean	Round II N = 45 %	Round II N = 45 Mean	Significance
History of Costume					
Assess silhouettes of various time periods and cultures, and recognize modern adaptations of these silhouettes.	54.9	1.88	70.4	2.27	.01
215.	42.6	1.77	72.7	2.14	.01
216.	41.0	1.72	68.9	2.02	.01
217.	41.0	1.74	68.9	2.16	.01
218.	42.6	1.87	71.1	2.22	.01
219.	47.5	1.97	68.9	2.27	.01
Evaluate current trends in apparel industry.	55.7	2.20	66.7	2.58	.05
Evaluate designs by both American and international fashion designers.	55.7	2.13	71.1	2.31	.01
Examine the influence of art on fashion.	44.2	1.88	71.1	2.16	.01
Mass Production					
Analyze the role of mass production in the fashion industry.	52.4	2.01	68.9	2.47	.01
220.	42.6	1.87	68.9	2.22	.01
221.	41.0	1.79	71.1	2.24	.01
222.	42.6	1.80	62.2	2.11	.01
223.	57.4	2.15	62.2	2.62	.01
224.	45.9	1.94	73.3	2.44	.001
225.	44.9	1.92	66.7	2.49	.05
Prepare a fashion design for mass production.	52.4	1.52	66.7	2.02	.05
226.	52.4	1.51	64.4	2.00	.05
227.	54.1	1.41	62.2	1.98	.05
228.	52.4	1.56	64.4	2.07	.05
229.	50.8	1.61	60.0	2.29	.05
230.	52.4	1.52	71.1	2.27	.01
231.	52.4	1.51	66.7	2.07	.05
232.	52.4	1.46	66.7	2.02	.05

Table 3 (continued)

Statement Number	Round I N = 61 %	Round I N = 61 Mean	Round II N = 45 %	Round II N = 45 Mean	Significance
233.	52.4	1.59	66.7	2.09	.05
234.	54.1	1.43	62.2	1.98	.05
235.	55.7	1.41	62.2	1.91	.05
Utilize assembly line production techniques.	50.8	1.45	53.3	1.98	NS
236.	49.2	1.52	55.6	2.02	NS
237.	49.2	1.69	53.3	2.40	NS
238.	52.4	1.54	53.3	2.02	NS
239.	50.8	1.40	53.3	1.98	NS
240.	54.1	1.34	57.8	1.93	NS
241.	54.7	1.26	64.4	1.76	.05
242.	55.7	1.41	51.1	2.02	NS
Maintain quality control.	50.8	1.69	53.5	2.13	NS
243.	50.8	1.60	55.6	2.20	NS
244.	54.1	4.75	53.3	2.02	NS
245.	54.1	1.40	55.6	1.89	NS
246.	54.1	1.41	55.6	1.93	NS
Computer Applications					
Evaluate computer applications for clothing/textiles technology.	44.1	2.08	68.4	2.42	.01
247.	49.2	2.02	68.9	2.42	.01
248.	45.9	1.97	68.9	2.27	.01
249.	49.1	2.03	75.6	2.44	.001
250.	45.9	1.79	71.1	2.36	.01
251.	45.9	1.74	71.1	2.33	.01
252.	49.2	1.56	68.9	2.27	.01
253.	49.2	1.53	68.9	2.22	.01
254.	49.2	1.41	68.9	2.13	.01
255.	49.2	1.54	71.1	2.31	.01
256.	47.5	1.54	68.9	2.31	.01
257.	47.5	1.56	68.9	2.20	.01
258.	49.2	1.56	71.1	2.24	.01
259.	41.0	1.92	73.3	2.44	.001

Appendix E.

Competencies/Subcompetencies Not Reaching Consensus

Following Round II

Competencies/Subcompetencies Not Reaching Consensus Following Round II

POST-SECONDARY CLOTHING/TEXTILES TECHNOLOGY COMPETENCY IDENTIFICATION

Competencies and Subcompetencies	Percent Consensus	Rating Mean*
PROFESSIONAL PRACTICES		
4. Sketch, photograph or construct samples in order to communicate ideas.	53.3	2.40
FASHION COMMUNICATION		
Plan advertising to promote fashions.	57.8	2.40
49. Utilize appropriate materials and techniques.	57.8	2.38
PRODUCT QUALITY		
58. Point out quality standards of home furnishings.	46.7	2.31
SPACE PLANNING		
64. Apply basic interior design principles to furniture layouts and space distribution.	55.6	2.40
65. Plan an environment with well-defined areas of activity and good traffic lanes.	57.8	2.42
Devise furniture arrangements which meet the standards of comfort and convenience, as well as attractive composition.	53.3	2.42
Design residential interiors using appropriate materials, methods, and professional procedures.	55.6	2.36
66. Plan residential interiors with emphasis on space planning, furniture, color, and lighting.	57.8	2.27
INTERIOR COMPONENTS		
77. Estimate textile yardage for upholstery, window treatments, floor coverings, and wall coverings.	54.5	2.59
DRAWING TECHNIQUES		
95. Draft designs using professional drafting techniques.	55.6	1.84
DESIGN COMMUNICATIONS		
Utilize architectural drawings.	55.6	1.76
97. Use architectural terminology.	53.3	1.67

Competencies and Subcompetencies	Percent Consensus	Rating Mean*
99. Use vocabulary applied to interior environmental systems: plumbing, heating, ventilating, electrical wiring, acoustics, and alternate energy sources.	46.7	1.62
HISTORY OF INTERIORS		
Analyze the history and profession of interior design.	55.6	1.62
101. Examine architecture and decorative arts from post-Renaissance to the Industrial Revolution.	55.6	1.51
102. Examine architecture and decorative arts from the Industrial Revolution to the present.	55.6	1.47
103. Analyze the influence of social and economic conditions on style of furniture, accessories and fabrics, and background treatments.	57.8	1.62
104. Determine architectural styles and their development in France, England, and America.	48.9	1.47
105. Evaluate art movements and their influence on interior designs.	51.1	1.44
Appraise contribution of interior designers, architects, and furniture designers.	46.7	1.56
106. Present furniture that evolved from each contemporary design movement.	55.6	1.51
107. Evidence knowledge of contemporary interior planning, design materials, and accessories.	57.8	1.69
108. Determine effect of contemporary interiors on modern design in home environments today.	53.3	1.67
UPHOLSTERY		
Construct slip covers.	51.1	2.02
114. Select fabric appropriate for slip covers.	48.9	2.11
115. Take accurate measurements.	57.8	2.38
116. Cut fabric into rectangular pieces according to measurements.	57.8	2.16
117. Pin rectangular pieces in place on furniture.	55.6	2.20
118. Mark pleats, tuck-ins, and seam lines with chalk.	53.3	2.20
119. Install zippers.	55.6	2.18
120. Attach skirt and dust covers.	53.3	2.16
121. Define terms related to upholstery.	53.3	2.27
122. Use upholstering tools.	48.9	2.27
123. Estimate fabric yardage for upholstering furniture.	53.3	2.42
124. Select appropriate upholstery fabric.	57.8	2.51
125. Select trim that coordinates with the color, pattern, and texture of cover fabric.	55.6	2.53

Competencies and Subcompetencies	Percent Consensus	Rating Mean*
126. Measure furniture accurately to determine cover pattern.	57.8	2.56
127. Cut and mark upholstery cover fabric.	55.6	2.44
129. Install the covers.	53.3	2.42
FURNITURE		
137. Restyle furniture pieces.	59.1	1.98
141. Remove old wood finish using appropriate techniques.	56.8	2.25
142. Use stains, fillers, varnish, and lacquer in finishing furniture.	53.3	2.18
AUTOMOTIVE UPHOLSTERY AND TRIM		
Upholster auto seats.	46.7	1.71
143. Select appropriate and compatible fabric for automobile interior.	44.4	1.84
144. Take accurate measurements for auto upholstery and estimate required yardage.	44.4	2.04
145. Use appropriate tools for auto upholstery.	42.2	1.98
147. Cut and mark auto upholstery fabric.	40.0	2.04
148. Make necessary repairs in seat padding.	44.4	1.93
149. Prepare and sew on welting.	51.1	1.89
150. Fit and attach fabric pieces to auto seats.	46.7	2.00
DRAPERY MAKING		
156. Take accurate window measurements for the fit of draperies.	55.6	2.38
157. Use appropriate small equipment for drapery and curtain construction.	57.8	2.13
159. Figure amount of fabric yardage needed for different types of draperies.	53.3	2.27
160. Perform tabling tasks in drapery construction.	57.8	2.04
161. Hem draperies and curtains.	55.6	2.11
162. Plan pleats and spaces for drapes.	46.7	2.24
163. Fold, pin, and stitch pleats.	53.3	2.20
164. Use correct procedures for breaking and tacking pleats.	51.1	2.13
165. Cite the purpose of accurate folding and banding of draperies and curtains.	53.3	2.13
166. Identify mounting methods used in the installation of draperies and curtains.	53.3	2.16
168. Describe the steps in the construction of window headings.	55.6	1.91
TEXTILES		
177. Plan a garment or interior using exotic quality fabrics.	55.6	1.76

Competencies and Subcompetencies	Percent Consensus	Rating Mean*
APPAREL CONSTRUCTION		
Construct a complete garment.	48.9	2.58
179. Determine figure type.	57.8	2.73
180. Ascertain correct pattern size.	55.6	2.64
APPAREL/PATTERN DESIGN		
200. Use a variety of sources for design inspiration.	56.8	2.20
MASS PRODUCTION		
Utilize assembly line production techniques.	53.3	1.98
236. Use industrial sewing terminology.	55.6	2.02
237. Observe safety regulations.	53.3	2.40
238. Operate industrial equipment with speed and efficiency.	53.3	2.02
239. Follow standardized methods for operation in assembly line production.	53.3	1.98
240. Figure earnings for sewing machine operators.	57.8	1.93
242. Perform assigned sewing operations with speed and accuracy.	51.1	2.02
Maintain quality control.	53.5	2.13
243. Inspect garments and locate construction defects.	55.6	2.20
244. Mark garments using standard defect symbols.	53.3	2.02
245. Repair defective garments.	55.6	1.89
246. Sort and pack finished garments.	55.6	1.93

*Rating Scale:
0 = Not Important (NI)
1 = Slightly Important (SI)
2 = Moderately Important (MI)
3 = Important (I)
4 = Very Important (VI)

Appendix G

Post-Secondary Clothing and Textiles

Student Competency Profile

Name: _____

POST-SECONDARY CLOTHING/TEXTILES TECHNOLOGY

Job Competencies

DIRECTIONS: Use the rating scale to the right to evaluate the student. Check the appropriate number to indicate the degree of competency. The numerical ratings of 4, 3, 2, and 1 are not intended to represent the traditional school grading system of A, B, C, and D. Ratings should reflect the student's JOB READINESS rather than the grade given in the class.

RATING SCALE:
4 = Skilled - can work independently with no supervision.
3 = Moderately Skilled - can perform job completely with limited supervision.
2 = Limited Skill - requires instruction and close supervision.
1 = No Exposure - no experience or knowledge in this area.

[a]Competencies common to Secondary Essential Competencies identified for Clothing, Apparel, and Textiles Management, Production, and Services.

[b]Competencies common to Secondary Essential Competencies identified for Home Furnishings and Equipment Management, Production, and Services.

[c]Competencies common to Secondary Essential Competencies for Salesperson, Ready-To-Wear in Marketing and Distributive Education.

[d]Competencies common to Essential Elements for Marketing and Distributive Education I.

[e]Competencies common to Essential Elements for Marketing and Distributive Education II.

4	3	2	1	
				PROFESSIONAL PRACTICES
□	□	□	□	**Assess own professionalism.**
□	□	□	□	[ad]Demonstrate interpersonal skills appropriate for business environment.
□	□	□	□	[a]Exhibit personal grooming necessary for career success.
□	□	□	□	Develop wardrobe suitable for a professional image.
□	□	□	□	[ad]**Evaluate career opportunities.**
□	□	□	□	**Prepare a professional portfolio.**
□	□	□	□	Assemble professional portfolio or exhibit.
□	□	□	□	Present portfolio or exhibit.

4 3 2 1

□ □ □ □ [a]Perform appropriate work skills.

MERCHANDISING

□ □ □ □ **Develop personal selling techniques.**

□ □ □ □ [ac]Demonstrate fashion knowledge on selling floor.

□ □ □ □ [ac]Use interpersonal skills on the selling floor.

□ □ □ □ Develop insight into customer buying motivation.

□ □ □ □ **Evaluate techniques in selling fashion apparel and accessories in retail and wholesale markets.**

□ □ □ □ [ad]Use fashion terminology.

□ □ □ □ Predict target customer.

□ □ □ □ [e]Develop training and motivational program for sales staff.

□ □ □ □ **Evaluate the fashion industry with regard to its scope and economic importance.**

□ □ □ □ [a]Demonstrate a working knowledge of production in the fashion industry.

□ □ □ □ Select retail fashion distribution techniques appropriate for the interests and lifestyles of firm's target customer.

□ □ □ □ Determine the consumption of goods within the fashion industry.

□ □ □ □ Utilize demographic and psychographic data on the consumer to develop fashion products and services.

□ □ □ □ Relate consumer preferences to what goods should be included in a retailer's assortment, in what quantities, at what time, and at what prices.

□ □ □ □ [c]Determine the potential demand among a store's customers for fashion merchandise.

□ □ □ □ [c]Analyze customer acceptance of merchandise.

□ □ □ □ Analyze merchandise in light of customer buying motives.

MERCHANDISE PLANNING AND CONTROL

□ □ □ □ **Evaluate merchandise planning and control: sales and inventories.**

□ □ □ □ [e]Analyze merchandise by department and classification.

□ □ □ □ [e]Develop short- and long-range sales plans.

4 3 2 1

□ □ □ □ [e]Plan stock in terms of dollars.

□ □ □ □ [e]Develop a seasonal merchandise plan and an open-to-buy plan.

□ □ □ □ **Evaluate planning and control of merchandise.**

□ □ □ □ Analyze unit control methods.

□ □ □ □ Plan and control staple stocks.

□ □ □ □ Plan and control fashion stocks.

□ □ □ □ **Assess the principles and procedures for profitable manipulation of merchandise.**

□ □ □ □ [d]Examine profit as percent of sales and percent of net worth.

□ □ □ □ [d]Project profit above expenses.

□ □ □ □ **Price merchandise**

□ □ □ □ [d]Determine elements in merchandise markup.

□ □ □ □ [d]Examine the pricing of individual items.

□ □ □ □ [e]Analyze competitive pricing policies.

□ □ □ □ Plan appropriate price lines.

□ □ □ □ [d]Use markdowns to improve the sale of a product.

□ □ □ □ [a]**Conduct unit control and/or physical inventory.**

□ □ □ □ **Plan inventory valuation of merchandise: cost method or retail method.**

□ □ □ □ Analyze the buying function and the principles of buying.

□ □ □ □ [c]Locate buying information.

□ □ □ □ Use effective purchasing fundamentals.

□ □ □ □ Buy fashion and staple merchandise and accessories.

FASHION COMMUNICATION

□ □ □ □ **Evaluate fashion promotion.**

□ □ □ □ [e]Implement retail sales promotion activities.

□ □ □ □ [e]Plan sales promotion activities to supplement and complement personal selling.

□ □ □ □ Predict fashion trends.

□ □ □ □ [e]Name types of advertising available for promoting fashions.

□ □ □ □ Describe characteristics of an effective advertisement.

□ □ □ □ Select media for fashion advertising.

□ □ □ □ Develop a fashion advertising campaign.

4 3 2 1

□ □ □ □ **Develop an effective merchandising display.**

□ □ □ □ [ab] Identify types of display including: interior display, exterior display, window display, and seasonal or special display.

□ □ □ □ [ab] Develop window and interior displays.

□ □ □ □ Solve technical and mechanical problems in display.

□ □ □ □ **Plan, produce, and organize a fashion show.**

□ □ □ □ Select and coordinate merchandise for a fashion show.

□ □ □ □ Write a script for a fashion show.

□ □ □ □ Plan set design, choreography, publicity, and staging.

□ □ □ □ Manage a fashion show.

□ □ □ □ Present commentary.

MARKETERS OF FASHION/TEXTILES

□ □ □ □ **Identify the various industries involved in marketing fashion goods.**

□ □ □ □ Name manufacturers of textile fibers, fabrics, leather, and fur.

□ □ □ □ List manufacturers of women's apparel, menswear, and fashion accessories.

□ □ □ □ Name foreign fashion market centers.

□ □ □ □ **Evaluate the services of auxiliary enterprises (advisors, sources of information, and promoters of fashion news) in the fashion industry.**

PRODUCT QUALITY

□ □ □ □ **Evaluate the impact of materials and construction on the quality and value of products.**

□ □ □ □ [a] Point out quality standards of accessory items.

□ □ □ □ [a] Point out quality standards of apparel items.

□ □ □ □ [a] Point out quality standards of non-textile products.

SPACE PLANNING

□ □ □ □ **Evaluate all aspects of interior space and its relationship to exterior space.**

4 3 2 1

□ □ □ □ [b]Analyze the two basic types of design: structural and decorative.

□ □ □ □ [b]Compare the principles and elements of design including space, line, shape, form, texture, and color.

□ □ □ □ **Evaluate the two basic approaches to space design: the closed plan and the open plan.**

□ □ □ □ Plan residential interiors using both traditional and contemporary interiors.

□ □ □ □ **Design commercial interiors with emphasis on space, function, lighting materials, aesthetics, and legal consideration.**

□ □ □ □ Examine the latest trends and materials used in commercial interiors.

□ □ □ □ Plan a barrier-free interior for a commercial space.

INTERIOR COMPONENTS

□ □ □ □ **Judge the nature of colors and how they combine with each other.**

□ □ □ □ Relate the impact of color to mood, temperament, and behaviors.

□ □ □ □ [b]Examine the three-dimensions or forms of color (hue, value, and intensity).

□ □ □ □ Analyze the basic color theories.

□ □ □ □ [b]Outline basic color schemes: related and contrasting.

□ □ □ □ Determine the effects of surroundings on color.

□ □ □ □ Apply color theory.

□ □ □ □ **Assess the techniques used in creating fabrics and hangings.**

□ □ □ □ **Combine fabrics that complement the mood and style created in a room.**

□ □ □ □ Utilize fabrics appropriate to life-styles and activities.

□ □ □ □ **Evaluate the value and function of windows and their appropriate treatment.**

□ □ □ □ [b]Select window treatments that are functional and appropriate in style.

□ □ □ □ Sketch the window treatment, show fabric or other material samples, and select picture of the appropriate furnishing.

□ □ □ □ **Select appropriate lighting for interior design.**

4 3 2 1

□ □ □ □ [b]Utilize aspects of lighting (function, aesthetics, and health).

□ □ □ □ Determine methods of lighting throughout an interior space: architectural and nonarchitectural.

□ □ □ □ Use natural daylight and artificial illumination in lighting plans.

□ □ □ □ Plan lighting for commercial and residential interiors.

□ □ □ □ **Select appropriate floor coverings according to warmth, comfort, and beauty.**

□ □ □ □ [b]Distinguish between the two categories of floor coverings: soft and hard.

□ □ □ □ [b]Select and use hard floor coverings: wood, masonry, vinyl, asphalt, rubber, cork, and mosaic tiles.

□ □ □ □ Analyze rug and carpet fibers and construction.

□ □ □ □ [b]Select and use soft floor coverings: rugs and carpets.

□ □ □ □ **Select appropriate wall treatments.**

□ □ □ □ [b]Point out the advantages and disadvantages of various wall treatments.

□ □ □ □ Plan wall coverings for commercial and residential interiors.

□ □ □ □ **Evaluate materials used in interior construction for their particular attributes.**

□ □ □ □ **Select accessories that reflect interests and tastes of the client.**

□ □ □ □ [b]Select functional accessories.

□ □ □ □ [b]Select accessories for walls, tables and counter tops, floor corners, and fireplace mantles.

□ □ □ □ Select decorative accessories to emphasize an area of the home or commercial work space.

□ □ □ □ [b]Plan an accessory grouping using the design principles of scale, proportion, balance, rhythm, emphasis, variety, and unity.

DRAWING TECHNIQUES

□ □ □ □ **Make renderings including: pencil, pen and ink, watercolor, pastels, color overlays, screentops, or airbrush.**

□ □ □ □ Use quick sketch methods in design presentation.

4 3 2 1

□ □ □ □ Use appropriate techniques for dimensioning and line weights.

DESIGN COMMUNICATIONS

□ □ □ □ Produce architectural drawings that show all the information needed for interpretation of design, instructions for biddings, and directions for construction.

□ □ □ □ Coordinate the structural system of a building with the interior environmental system.

HISTORY OF INTERIORS

□ □ □ □ **Evaluate contemporary furniture and design movements.**

□ □ □ □ **Plan interior design utilizing traditional styles, contemporary styles, and historical restoration.**

SEWING EQUIPMENT AND MACHINES

□ □ □ □ **Select, use, and maintain sewing and pressing equipment.**

□ □ □ □ [ab] Select and purchase sewing supplies, notions, and sewing and pressing equipment.

□ □ □ □ [ab] Use appropriate pressing equipment such as point presser, needle board, press mit, press ham, tailor's iron, and clapper.

□ □ □ □ [ab] Thread, adjust, operate, and maintain different brands of domestic sewing machine.

□ □ □ □ [ab] Thread, adjust, and safely operate the overlock, lockstitch, and the blind hemmer machine.

□ □ □ □ Make minor adjustments on the industrial machines such as replacing needles correctly, oiling, and adjusting the tension.

UPHOLSTERY

□ □ □ □ Prepare and sew welts.

FURNITURE

□ □ □ □ **Evaluate furniture according to style, period, and quality.**

□ □ □ □ Examine the basic styles of furniture.

□ □ □ □ Outline characteristics of the basic styles of furniture periods.

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□ □ □ □ Analyze characteristics and descriptions of furniture periods.

□ □ □ □ Point out common variations of furniture styles.

□ □ □ □ **Complete furniture repairs and restyling.**

□ □ □ □ Identify different types of furniture joints.

□ □ □ □ Use appropriate tools of repairing wood furniture.

□ □ □ □ Repair broken furniture legs, backs, and arms.

□ □ □ □ **Refinish wood furniture.**

□ □ □ □ Recognize/identify different kinds of woods.

□ □ □ □ Use appropriate tools for furniture refinishing.

□ □ □ □ Remove spots, rings, scratches, and gouges from wood.

AUTOMOTIVE UPHOLSTERY AND TRIM

□ □ □ □ Make pattern for auto upholstery.

□ □ □ □ **Customize automobiles.**

□ □ □ □ Select carpet appropriate for floor and interior of automobile.

□ □ □ □ Take accurate measurements of automobile top, floor, interior, and window.

□ □ □ □ Make pattern for vinyl tops, floor carpet, and carpet for interiors for automobiles.

□ □ □ □ Cut vinyl and carpet fabric for automobiles.

□ □ □ □ Use appropriate tools for installing carpet, replacing window glass, applying vinyl, and attaching mechanisms such as door latches and locks in automobiles.

DRAPERY MAKING

□ □ □ □ **Utilize appropriate techniques for construction of different styles of draperies, curtains, and headings.**

□ □ □ □ [b]Complete a work order for curtains, draperies, and headings.

□ □ □ □ [b]Identify the types of window headings available for accessorizing draperies.

TEXTILES

□ □ □ □ **Assess basic textiles with focus on fibers, yarns, fabrics, and finishing processes.**

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□ □ □ □ [a]Determine properties that affect the hand, appearance, and performance of textiles.

□ □ □ □ Outline the steps in the manufacturing, marketing, and distribution of textile products.

□ □ □ □ Analyze natural and man-made fibers, yarn and fabric construction methods, and finishing processes.

□ □ □ □ Examine historical and contemporary textile developments.

□ □ □ □ Examine current developments in textiles.

□ □ □ □ **Compare textile characteristics to end use performance.**

□ □ □ □ [a]Relate textile characteristics to end use performance.

□ □ □ □ Predict end use performance of textiles used in interiors.

□ □ □ □ [ab]Analyze suitable textiles for use in apparel and in interiors.

□ □ □ □ **Point out textile characteristics and care requirements of various fabrics.**

APPAREL CONSTRUCTION

□ □ □ □ [a]Take accurate body measurements.

□ □ □ □ **Select colors, textures, lines, design, and fabric most flattering for the individual.**

□ □ □ □ [a]Analyze individual fitting problems to determine needed pattern alterations.

□ □ □ □ [a]Make pattern alterations for different figure problems.

□ □ □ □ [a]Make necessary garment alterations for a perfect fit during the construction process.

□ □ □ □ [a]Exhibit accuracy in pinning, cutting, and marking garment pieces.

□ □ □ □ [a]Use unit construction when assembling garment pieces.

□ □ □ □ Apply interfacing, underlining, and lining where appropriate.

□ □ □ □ [a]Manipulate with skill the following construction techniques:

- dart treatments
- pockets (inseam and patch)
- collars - (stand up and convertible)
- waistline and/or waistband
- sleeves
- buttonholes (machine)
- zippers and fasteners

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- belts
- hems
- pressing
- appropriate hand stitches

□ □ □ □ Evaluate the appearance and fit of the completed garment through observation of grain perfection, compatible inner fabric, proper construction techniques, and correct pressing techniques.

□ □ □ □ Select appropriate fabric for custom tailored and simplified (quick) tailored garments.

□ □ □ □ Use tailoring terminology.

□ □ □ □ Fit and alter commercial suit pattern.

□ □ □ □ Select appropriate findings such as interfacing, underlining, lining, buttons, thread, and tape for tailoring techniques and type of garment.

□ □ □ □ Select construction techniques in terms of fiber content and characteristics of fabric for custom tailored and/or simplified tailored garment.

□ □ □ □ Manipulate with skill the following tailoring techniques for menswear and ladies wear:

- application of fusible interfacing
- application of woven interfacing
- underlining
- cloth-lipped buttonholes
- taping and padstiching and other hand stitches
- undercollar, upper collar, and lapels
- sleeve, sleeve head, and shoulder shapes
- pockets (welt, double welt, flaps, and besom)
- hem, lining, and Hong Kong finish
- buttons and button placement

□ □ □ □ **Evaluate the fit and appearance of custom tailored and simplified tailored garments.**

APPAREL/PATTERN DESIGN

□ □ □ □ **Analyze consumer behavior patterns and demographic characteristics in regard to fashion.**

□ □ □ □ **Distinguish fashion in the various stages of the fashion cycle from innovation to obsolescence.**

□ □ □ □ **Outline the progression of fashions from fiber to consumer.**

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□ □ □ □ **Evaluate the work of current American and international fashion designers.**

□ □ □ □ **Analyze designer's role in production.**

□ □ □ □ Create designs for a fashion line.

□ □ □ □ Develop a fashion line.

□ □ □ □ Organize a fashion line.

□ □ □ □ Fabricate a fashion line.

□ □ □ □ [a]Categorize trim and notions by appropriate end use.

□ □ □ □ Draw a working sketch of fashion design.

□ □ □ □ **Develop and produce a line.**

□ □ □ □ [a]Use fashion and production terminology.

□ □ □ □ [a]Apply principles and elements of design.

□ □ □ □ Sketch designs using various media (pencil, charcoal, pen and ink, wash, watercolor, and brush).

□ □ □ □ Execute designs through the fashion illustration technique.

□ □ □ □ Execute designs through flat pattern techniques.

□ □ □ □ Execute designs through draping techniques.

□ □ □ □ Execute designs through drafting techniques.

ATLERATIONS

□ □ □ □ **Fit, alter, and repair garments.**

□ □ □ □ [a]Use alterations terminology.

□ □ □ □ [a]Fit garment on individual while maintaining grain.

□ □ □ □ Make alteration markings on garment with chalk or pins.

□ □ □ □ Record alteration markings on alteration ticket.

□ □ □ □ [a]Interpret alteration markings and make alterations on garments.

□ □ □ □ [a]Select and use appropriate alteration techniques for the following:

- lengthen or shorten a garment
- increase or decrease garment width
- adjust darts
- alter waistline and hipline
- alter crotch and trouser leg.

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□ □ □ □ HISTORY OF COSTUME

□ □ □ □ **Assess silhouettes of various time periods and cultures, and recognize modern adaptations of these silhouettes.**

□ □ □ □ Research museum and library sources for fashion identification.

□ □ □ □ Examine fashion designs and motifs from ancient civilization to 18th century.

□ □ □ □ Examine fashion designs and motifs from 18th century to the present.

□ □ □ □ Determine customs which affect styles.

□ □ □ □ Analyze the sociological, technological, economic, environmental, and psychological influences on fashion.

□ □ □ □ **Evaluate current trends in apparel industry.**

□ □ □ □ **Evaluate designs by both American and international fashion designers.**

□ □ □ □ **Examine the influence of art on fashion.**

MASS PRODUCTION

□ □ □ □ **Analyze the role of mass production in the fashion industry.**

□ □ □ □ [a]Describe steps in the process of mass production.

□ □ □ □ Differentiate between apparel construction processes used in large and small companies.

□ □ □ □ List market weeks in the Apparel Mart and market places in the world.

□ □ □ □ [a]Use fashion industry terminology.

□ □ □ □ Describe designer's role in the apparel industry.

□ □ □ □ Describe related jobs in the apparel industry.

□ □ □ □ **Prepare a fashion design for mass production.**

□ □ □ □ [a]Make master or stock pattern from designer's sketch.

□ □ □ □ Grade patterns using a pattern grader or computer grader.

□ □ □ □ Construct sample garments.

□ □ □ □ Compute production costs based on fabric yardage, findings, and trim.

□ □ □ □ Prepare production chart that includes all garment pieces, a sketch, a swatch of fabric, and all trimmings specifications.

□ □ □ □ Construct cutting markers.

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□ □ □ □ Interpret cutting ticket.

□ □ □ □ Prepare fabric and cut garment by hand or machine.

□ □ □ □ Mark and shade cut garment pieces.

□ □ □ □ Sort and bundle garment parts for delivery to assembly area.

□ □ □ □ Distribute and collect bundles of garment parts and supplies.

COMPUTER APPLICATIONS

□ □ □ □ **Evaluate computer applications for clothing/textiles technology.**

□ □ □ □ [e]Use computer systems for business finance and sales.

□ □ □ □ Use computer systems for telecommunications.

□ □ □ □ [e]Use computer systems for merchandising and marketing.

□ □ □ □ Use computer systems for production planning.

□ □ □ □ Use computer systems for materials handling.

□ □ □ □ Use art/graphics computer systems for apparel design.

□ □ □ □ Use art/graphics computer systems for textile design.

□ □ □ □ Use robotics in apparel and textile manufacturing.

□ □ □ □ Use computer systems for pattern making.

□ □ □ □ Use computer systems for grading and marker making.

□ □ □ □ Use computer systems for cutting.

□ □ □ □ Use computer systems for production control (sewing).

□ □ □ □ Use computer systems for distribution.